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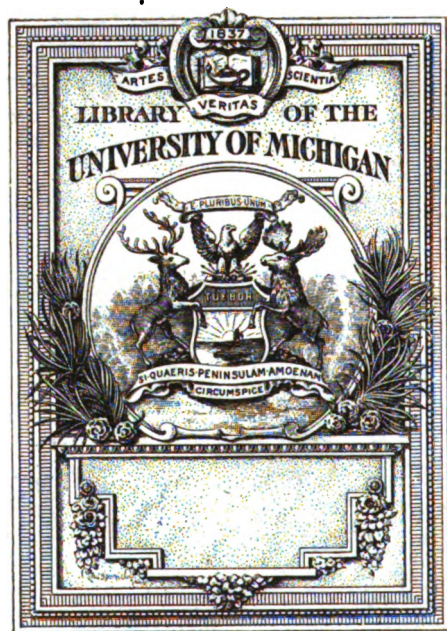
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M. F. COOMES, A. M., M. D., } EDITORS.

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

CIRRHOSES OF THE LIVER.*

BY JOSEPH B. MARVIN, M. D., LL. D.

The subject of cirrhosis of the liver has been extremely interesting to me for a good many years. I suppose it has been to every physician who looks for explanations of disease along definite mechanical lines. The etiology, morbid anatomy, and clinical symptoms of this disease, at first sight, appear more simple, clear, and comprehensible than the phenomena of almost any other disease. If there was one disease more than another about which the pathologist could say that knowledge is complete, it is portal cirrhosis of the liver.

I have never been thoroughly satisfied with the explanations given by standard authors in regard to the etiology of all cases of cirrhosis of the liver. I happen to have had some few cases under observation extending over a series of years where I could rule out of consideration the history of alcoholism, which is put down as the sole cause of ordinary portal cirrhosis. I have had opportunity a few times in years gone by of making autopsies in some of these cases confirming the diagnosis of general portal cirrhosis without any history of alcoholism, and in searching for a cause it seemed to me that a very plausible one was that it was a toxemia; that troubles in the intestinal or gastro-intestinal tract cut a deeper figure in the etiology of the various cirrhoses of the liver than the books, as a rule, usually attribute to it.

Some year or more ago I incidentally came across a monograph by a French author taking the same view, so I have searched the literature,

*Abstract of a paper read before the Louisville Medico-Chirurgical Society, November 18, 1898. For discussion see p. 19.

particularly the French, for further evidence on the subject during the last two years. The French more than any other pathologists, as far as my reading extends, have inclined to the view that certain forms of cirrhosis of the liver are non-alcoholic in character. Beginning with the so-called Hanot liver, as it is known in France, we may call it the biliary or hypertrophic form; it is put down as being non-alcoholic in character, the process being infectious in origin. Lanceraux also in the last few years published a series of experiments on this subject, taking the view that the ordinary common wine which is consumed by the French laborer and peasant was a more frequent cause of the atrophic form of cirrhosis of the liver than whisky, and in attempting to ascertain the cause he suggested that it was the adulteration of this common wine with plaster of Paris, stating that it was a well-known fact that the plaster of Paris itself was largely adulterated with sulphate of potassium. And he formulated the theory, which has not been confirmed by others, that sulphate of potassium constantly ingested through the medium of common wine cut a very important figure in the etiology of the atrophic form of cirrhosis of the liver. So the French seem to be in the advance guard on this subject, claiming that the two most common forms of cirrhosis of the liver, viz., the small atrophic form, which we have generally regarded as synonymous with chronic alcoholism, and next that the so-called hypertrophic or biliary cirrheses, as being non-alcoholic in character, perhaps infectious or toxic.

So recent a writer as Hawkins, in Clifford Allbut's System of Medicine, still holds to the old view and classifies cirrheses of the liver under very simple heads: First, the wasting or atrophic form, alcoholic in character. Next, the so-called hypertrophic, large, or biliary cirrhosis, sometimes alcoholic, sometimes not. Third, syphilitic cirrhosis, this form being most frequently congenital. (My experience has been that syphilitic cirrhosis is not always congenital; that some of the cases that have been dignosticated as cirrhosis of the liver and reported cured were not alcoholic in character, but were syphilitic in character and yielded to the iodides.) Fourth, malarial.

This is a very simple classification: Alcoholic, by far the larger number; two forms more frequently noticed is the small or hob-nail liver, next the hypertrophic. Syphilitic, a much smaller class. Lastly, malarial, representing a smaller class than either of the others. Then under the head of pathological curiosities or freaks he groups cer-

tain others as due probably to cardiac trouble, tubercular trouble, injuries, etc.

I do not believe the last word has been said about cirrhoses of the liver, and my object in selecting this trite subject was to provoke discussion and lay before you some recent studies on this subject. In the first place, I do not believe we can correctly make the classification above outlined. The chances are that we are on the eve of very important discoveries in regard to this disease, and when these discoveries shall have been completed, radical changes will be necessary in our nosology. It would seem in the light of a recent paper, to which further reference will be made presently, that the idea that alcoholism is the prime factor in the causation of cirrhosis of the liver would have to give place to other causes, and instead of being the primary cause it is perhaps only a secondary cause. I do not believe we can rule out alcoholism altogether, and it seems to me that alcohol might act in one of two ways, either by being taken in sufficient quantity, especially on an empty stomach, and kept up for a sufficient length of time; being taken directly into the portal circulation, it might act injuriously upon the liver cells and upon the liver connective-tissue. Next, I believe that it may act secondarily by interfering with digestion, upsetting the stomach and intestine, allowing certain toxins to be absorbed, the latter acting directly on the liver cells and liver connective-tissue.

Now, if alcohol was the principal factor in the production of this disease, and if alcohol had any such specific property as that, why do we not have more cases of cirrhosis of the liver? The number of cases of cirrhosis of the liver to the number of persons who drink alcoholic beverages in this country or any other civilized country is certainly out of all proportion to claim that there exists a direct cause and effect. Another thing I make bold to say, that I believe that a small minority only of cases of very small livers or very large livers are cirrhotic. I make bold to say another thing, that the detection of a small liver, one of the most common forms of genuine cirrhosis of the liver, is by no means an easy matter, and our so-called methods of physical examination are very likely to mislead us.

I have reached the conclusion that alcohol is simply an irritant or one of a class of irritants acting either primarily or secondarily in the production of cirrhosis of the liver, and that we may have a host of other causes grouped under the same heading—irritants.

Another point: We can not explain all the phenomena of cirrhosis of the liver by the ordinary mechanical explanations as laid down in text-books. If we could, we ought to have a picture that is always the same. I think all pathologists present will bear me out in this statement, that in the majority of instances where there is a history of alcoholism, a large, smooth, fatty liver, or one not diminished in size, will be found. It is a rare thing to find the hob-nail liver. In the majority of cases of so-called alcoholic cirrhosis, due to the degenerative effect of alcohol, the liver cells are first destroyed; next there is a stimulation of the connective tissue, making it overgrow, and as it overgrows, then contracts, following the usual characteristics of fibrous tissue, and by contracting making the liver harder, firmer, thicker, squeezing out the hepatic lobules. Under these conditions, why do we not have jaundice?

If you cling to the idea of the pathology as laid down in the text-books, even up to the last one issued, you have to believe that the same cause can narrow the portal circulation and dilate the biliary canals at the same time. I do not believe you can explain it upon this ground. I think the classification as laid down by even the latest and best authors is purely arbitrary and fictitious, and that under the heading of cirrhosis you may have all shapes, from a large liver to a small liver, from one with a large amount of fibrous connective-tissue throughout it to others with a small amount, and so on.

There is a very interesting explanation as to why irritation should act on the cells and destroy them and at the same time stimulate the fibrous tissue. The cell of any organ is the highest possible development, the highest point of evolution; it has more functional activity, more work to do; it is the life of the organ. The connective-tissue is phlebian, it is of less importance, it does not have much to do. If there is sufficient irritation to destroy the life of the cell, then you will have acute yellow atrophy. It might destroy a man in a few days. It does it so quickly that I am sure all of you have seen cases in which you have thought, here is a case of toxemia; there is some powerful poison at work in the system which strikes at the life of the patient, which destroys the secreting portion of the liver and overwhelms the patient in a few days. I believe that cirrhoses of the liver are on the same line, the poisons in smaller doses acting more slowly and chronically. You have a gradual destruction of the parenchyma of the liver. The toxine destroys the liver cells and constantly stimulates the fibrous

tissue, which makes it overgrow. It seems to me that the solution is not so difficult as we are led to believe by the authorities.

Acute yellow atrophy, which is the most formidable and destructive of all the hepatic troubles that we see, may be explained in the manner stated. There are a number of authorities on cirrhosis of the liver who state that all forms are characterized first by destruction of the cells, which is accompanied by more or less evolution or development of the connective-tissue stroma of the liver. I incline to the view that the change is primarily in the cells, and only secondarily in the stroma. The fibrous tissue overgrowth may be conservative.

(The recent studies of Adami were discussed at length.) In the light of these investigations, we shall have to abolish the distinction between the so-called acute and chronic cirrhosis; it seems as if the bacteriologist would recast our entire pathology. His sphere of "infectivity" has spread to embrace chronic as well as acute conditions. Verily, the "trail" of the microbe is over them all.

(A number of cases were detailed with results of the autopsies, illustrating the views of the speaker.) Just as long as you can have an anastomosis through the superficial veins, there may be no ascites; congestion of various organs may occur, and bleeding from the nose, stomach or bowels may be profuse and give temporary relief. Now, as the disease progresses there may be either a narrowing of the portal system, or by pressure stop the free anastomosis and cause ascites. How did the blood get through without any ulceration? How can you account for the sudden supervention of these cerebral symptoms? I believe it is due to the absorption into the blood of toxins, setting up an arteritis; I believe that in many cases you will find an arteritis and peri-arteritis, and frequently associated with them you will find valvular troubles of the heart. I believe it is the toxine that gives rise to the arteritis and allows oozing to take place through the vessel walls in such large quantities without ulceration or any visible solution of continuity in the course of the vessels.

There are many interesting points that you might discuss, and that are still being discussed in regard to these cases: Why in some you have no jaundice, why some will start with gastric symptoms and in a few weeks there will be some sallowness, dinginess, muddiness of the complexion, slight jaundiced appearance of the face and sclerotics, then after a little while an improvement in all these symptoms, to be followed a little later by marked ascites.

Another thing: I do not believe any of you can tell just what is going to be the result, as far as the prognosis is concerned, of puncture of the abdomen. I believe tapping ought to be done early and repeated if necessary.

I have seen a case where there was no ascites, but there was an enormous edema of the abdominal walls.

Treatment. Strict regulation of the diet and an entire withdrawal of alcoholics are of prime importance. I have seen a few cases that were materially benefited by iodide of potassium in small doses, well diluted, taken on an empty stomach, combined with or taken simultaneously with salines, the sulphate of soda in hot water. Were these cases of syphilis? Syphilis and whisky frequently go hand in hand. If syphilitic, then, of course, I believe that iodide of potassium and bichloride of mercury might do some good.

Next, the duration of life is greater than many of us have been taught to believe. I have generally had an idea that when a man came to me with gastric symptoms, with a history of alcoholism, with as I thought a small liver, the patient later developing hematemesis or piles, that he had cirrhosis of the liver and would soon succumb. Some of these patients live a long time. Have we been mistaken in our diagnosis; was it simply gastric catarrh from alcohol and not cirrhosis of the liver?

Then comes the so-called malarial cases: You see a man with symptoms simulating malarial fever; you can only make a diagnosis by the presence or absence of the plasmodium malariae in the blood. Without this blood examination, how can we say that it is or is not a case of malarial cirrhosis?

Another point is the use of saline injections. I believe that saline injections ought to be practiced far more frequently than they have been. That takes us back to the case mentioned previously: She had a profuse hemorrhage one day. When I arrived she was pulseless, eyes fixed and glazed, and her face had a death-like pallor. She had practically stopped breathing. I did not wait to find a vein, I simply injected a pint in the axilla and a pint in the groin. I do not know of any thing that acts as a hemostatic as quickly as injection of saline solution. This woman was virtually brought back to life on several occasions by this plan of treatment. You can easily introduce a pint in the axilla or under the breast. I believe in the hemorrhage of typhoid fever it is a most admirable remedy. Instead of giving ergot, tannic

acid, tannin, etc., give a saline injection. Of course it would be better to inject it into a vein, but anywhere will do. I do not believe you will find a particle of trouble from getting air in with it; this has been proven a fallacy. How it acts you can explain in any way you desire, but it is very simple to me. I believe shock is best treated not by strychnine, digitalis, whisky, etc., but by saline injections. In making the saline solution I use forty or fifty grains of salt to a pint of boiled water.

LOUISVILLE.

THE SERUM TREATMENT OF DIPHTHERIA.*

BY WILLIAM CHEATHAM, M. D.

I propose in this paper to endeavor to answer the objections which have been urged to the use of the serum treatment of diphtheria, as, strange to say, there are still some disbelievers.

First: Some refuse to use it, saying there have been some fatal cases as the result. Prof. Langerhan had a son to die immediately after an injection of antitoxin. Prof. Strassman, who at the request of the State held an autopsy, came to the conclusion that it was the result of the inspiration of food. Prof. Langerhan opposes this view. The antitoxin was proven to be normal. Chas. T. McClintock says such deaths are the result of shock. Adamkiewiaz attributes such deaths as that of Miss Valentine and the son of Prof. L. to the forcible injection of the serum and its specificity causing a disturbance of the self-regulating apparatus. Tossett reports a fatal case in which a cerebral embolism was found. Johannersen says it is the result of the introduction of foreign serum into the blood, and for that reason the antitoxin should be as concentrated as possible. Seibert and Schwyzer think air must have entered the venous circulation. Moizard and Bouchard report a case of angina in which the Loeffler bacillus could not be found; antitoxin was given, and the throat was clear in three days. In three more days vomiting, diarrhea, and fever set in, and the fourth day the patient had convulsions, strabismus, dilated pupils, and coma, which they attributed to the antitoxin. Roux does not think so, as the same serum had been used in one hundred thousand injections in France with no accident.

* Read before the Mitchell District Medical Society, December 29, 1898.

That sudden deaths do sometimes follow the injection of antitoxin no one doubts, but it has not been proven that the antitoxin was the cause. Death follows hypodermatics of other substances; it follows the inhalation of anesthetics, yet who will give up their use? Deaths following the use of antitoxin, even could it be proven that the antitoxin was the cause, considering the millions of times it has been used, are exceedingly rare, and should keep no one from using a remedy which has saved so many lives and has reduced the death-rate of diphtheria at least one-half, and has rendered the management of a majority of cases of this dreadful disease so simple and so painless.

Second: The claim has been made that paralysis with or without death is more common after the use of antitoxin. Jacobi admits we see more cases of paralysis because more cases of diphtheria recover. If the death-rate has been reduced fifty per cent by the use of antitoxin (which statistics prove), and in making this statement that old quotation, "the lie, the damn lie, and statistics," is not forgotten, there are just twice as many cases left to be paralyzed. Washbourn (*British Med. Jour.*, Aug. 17, 1895) agrees with Cohen as to the cause of the increase in the number of cases of post-diphtheritic paralysis, and gives as another reason that the antitoxin does not neutralize the effect of the invasion of other bacteria and streptococci. Dana (*Med. Record*, April 11, 1896) says antitoxin does not decrease the number of the palsies, and as a reason he says not enough is given to prevent the specific action of the toxin upon the nervous system.

I admit there are more palsies since antitoxin came into use, but not so many in proportion to the number of recoveries. To objection second, then, I say it is not so.

Third: Nephritis is more common after the use of antitoxin. The *International Medical Annual* of 1896, page 237, says Thomas and Mapes immunized one hundred and thirty-six children, aged from three weeks to four years, introducing from 50 to 200 units, and found but four with a trace of albumen in the urine, but this in no case persisted more than four days. Reiche (*Centralbl. f. Innere Med.*, No. 50, 1895) investigated the kidneys of eighty-five fatal cases before the antitoxin period, and found serious trouble with the kidneys of all; there is positive evidence that antitoxin does not damage the kidneys. The damage, if any, is done by the toxin before the use of the antitoxin.

Fourth: That antitoxin has an unfavorable effect upon the blood, decreasing the number of red corpuscles, etc. Billings (*Med. Rec.*,

April 26, 1896) investigated this subject thoroughly, and says the anti-toxin treatment of diphtheria has no deleterious effects upon the blood corpuscles; on the contrary, it seems to prevent degenerative changes which would otherwise be brought about. Schlesinger (*Arch. f. Kinderh.*, 1896, Bd. xix, S. 378) and Ewing (New York Med. Jour., Aug. 10, 1895,) arrive at the same conclusion.

Fifth: Antitoxin increases the temperature and disturbs the circulation. It is true that within twelve hours after antitoxin is injected the temperature may rise from one to three degrees, but in the next twelve or twenty-four hours it becomes normal. The circulation sympathizes with the rise and fall of the temperature.

Sixth: The use of antitoxin has not decreased the death-rate of diphtheria. Statistics on this subject are becoming so large that they are difficult to manage. Any one with an unbiased mind, and who has treated many cases of diphtheria in pre-antitoxin days and since antitoxin has come into use, must say nay to objection six. The favorable statistics on this subject are attacked in many ways. The objector tells us continually that the disease is not so severe in type; that many cases called diphtheria now are not diphtheria; that Loeffler's bacillus is not the true bacillus; that it is found in the mouths of many healthy people; that for these and other reasons our statistics are false; that the gross mortality is not decreased; that immunizing is a failure; that the local and general treatment is kept up as formerly.

Statistics show beyond any doubt that the fatality of diphtheria has been decreased at least fifty per cent. Numbers of physicians have told me that it was very rare to have a case recover in their practice before they began the use of antitoxin. I remember distinctly how I used to dread seeing a case of diphtheria; now I feel quite sure, if I see a case the first day, it will get well; the second and third days are less hopeful, yet many times more hopeful than in pre-antitoxin days.

Loddo (*Riforma Med.*, July 11, 1896) alone collected from hospitals of Europe, America, Australia, and Japan ten thousand cases with a mortality of 18 per cent. Seven thousand of these cases, with an average mortality of 20 per cent, were compared with preceding cases which had a mortality of 44 per cent. Guerard collected 3,760 cases with a mortality of 7.8 per cent. There are no doubt many gentlemen here whose experience is of much more interest than statistics from the distance; the number of their cases may be small, but their report will be of much more interest. Holt, Northrup, O'Dwyer, and Adams, the

committee of the American Pediatric Society (Arch. of Ped., July, 1896), made a most interesting and unbiased report; their cases were from the private practice of 615 physicians from all over the United States and Canada. There were 5,974 cases with 8.8 per cent mortality; 4,120 cases injected the first three days with 4.8 per cent fatal; 1,448 cases injected after the fourth day, 27 per cent died.

Cases of laryngeal diphtheria and diphtheria of the eye give the most convincing proof of the efficacy of antitoxin. In 1,256 cases, 50 per cent recovered without operation; of 533 intubated, mortality was 25.9 per cent. Where a great majority of eyes were lost, in which diphtheria had involved that organ, now but a few are lost in which antitoxin is used. My own personal experience has been that the necessity of an operation in laryngeal diphtheria is getting more and more rare as the physician is using more antitoxin. I have myself just discharged a case of laryngeal diphtheria which a few years ago I would have had to intubate. I gave 2,000 units; the disease was primarily in the larynx; the tonsils became involved afterward.

Dr. Z. T. Funk, of Corydon, Ind., wrote me the other day that in twenty-two years of practice he had seen but one case of membranous croup get well before he commenced using antitoxin, "hence you may imagine how I felt when I discovered that my little boy had it." I publish Dr. Funk's letter in full, as it is good home testimony as to the effect of diphtheria antitoxin.

He says: "I must confess that I was somewhat skeptical as regards its use, but what else could I do? nothing I had ever given seemed to have any effect on the course of the disease, so after calling in Drs. Lawson and Daniels to confirm my diagnosis and advise, I felt that unless there was some help in antitoxin I would soon witness the death of my dear little boy.

"History of case: On Monday, October 9th, my wife went to Georgetown by rail, twelve miles, and came home Tuesday, 11th, and Marcus T., a boy two years old, had sore throat with some fever, but was better next day and continued to improve until we thought him most well, when on Sunday, 15th, he began to get hoarse; could scarcely talk. He began to cough hoarse and croupy, was restless, no fever, and at 1 A. M. we got up with him; was breathing hard, cough worse; thermometer registered 97° F.; was listless and rather stupid; passed no water for fifteen hours; gave him subsulphate of mercury and ipecac as an emetic; hot applications to throat, and at 9 A. M. gave 1,000 units of

antitoxin, and he soon began to breath easier with slight perspiration. I gave him four doses, $\frac{1}{2}$ grain calomel, one every hour, when bowels moved; gave tinct. iron and chlorate potas. and boracic acid every two or three hours. At 9 P. M. gave him antitoxin, 1,000 units more. He rested well, coughed only two or three times during the night, was playful next morning, would have clothes on, ate some, and temperature came up to normal. At night his cough seemed to be tighter, and we gave him another 1,000 units. Rested well, but still hoarse, could not talk, and next morning I telephoned you, when you kindly advised another dose of 500; gave it, and continued small doses of calomel to open bowels, with syrup of white pine and muriate of ammonia, and by your suggestion fumigated room with tinct. of benzoin, and the little fellow continued to get better until well; but he was hoarse for three or four weeks. I did not see any untoward effects from the antitoxin except a slight rash; and a few days after he complained of one knee hurting, and some spots came on leg that looked exactly as if they were caused by a bruise, several of them the size of ten-cent or twenty-five cent pieces, but all cleared up, and he now is apparently as well as ever.

"Since that I have had eleven cases, eight of them laryngeal diphtheria (croupous diphtheria or membranous croup), and three the ordinary form or tonsillar diphtheria, all of whom made good recoveries except one, a little girl of two years, who was in a moribund state when I arrived. I told the parents I was too late, but they were anxious for me to do something, so I gave 1,500 units. She was so near gone she did not flinch. She died in less than two hours after my arrival. This case was of the pharyngeal variety. Another case of same (membranous croup) I want to relate. Washington Applegate, nine months old, son of Irwin Applegate of our town; babe took sick November 3d, sore throat, slight fever; saw him 4th but could not determine what was the matter, and told mother if he coughed croupy to send for me, but she neglected until next morning, and when I saw him he was breathing very hard and hoarse, shrill cough; diagnosed croup; could not get antitoxin except 500 or 3,000 units. I gave 500 units with mild chlorid. and carb. soda, quinine, syrup white pine, and muriate of ammonia. We expected more antitoxin on stage or express. At four o'clock I got word to come over, that the babe was dying. I got the 3,000 units; at the same time word came to come to Ora Shucks', four miles, boy three years old had croup; so I gave Applegate babe 1,500

units of the 3,000, and took rest in syringe and drove to Shucks', four miles, and gave his boy the remainder. Applegate babe was very bad. The 500 seemed to have no effect on it. I had ordered an emetic of subsulphate and ipecac without much relief. Gave whisky before antitoxin, but when I gave the antitoxin the babe seemed to give down, and as all thought dying, but I rubbed him with whisky and warmed him, and in ten to fifteen minutes he began to revive, and appeared better all night. Gave plenty of whisky, cough syrup, and nourishment; appeared better next morning, but gave him 1,000 units more, and the babe continued to improve and now is entirely well.

"I have seen two little girls who only required one dose of 1,500 units each, one four and one two and a half years; the one four with croup and pharyngeal diphtheria, the other tonsillar diphtheria.

"Conclusions from my limited experience: Early treatment the best; large dose, 1,500 to 2,000, at once the best; followed by smaller dose if needed; inject antitoxin between points of scapulæ on either side of spine; no danger of abscess if proper aseptic precautions are observed.

"I have used the single X. except one dose, and find just as good results. There is but one point in favor of XX., and that is the less bulk of serum to be injected. I have practiced giving it every twelve hours. I think that if an additional dose is required, there is no good reason for waiting twenty-four hours.

"Now, doctor, as I said, I have had eleven cases, eight of them laryngeal-diphtheria and three of the tonsillar diphtheria, ten of whom have made good recoveries. The one should not be considered as being treated, as it was dying when first seen. I think antitoxin the greatest discovery that medical science has made since Jenner gave us vaccination. I think it one of the few specifics."

This letter I think is one of the strongest indorsements I ever saw of antitoxin. If statistics are of any value whatever, those of the wonderful effect of antitoxin in diphtheria are the most complete, and should be the most convincing ever published. Our opponents say that diphtheria is not so severe as in former years. Antitoxin has been used in so-called malignant cases with wonderful results; it has been used in hospitals say one month with good result, then left off because it could not be obtained, and the death-rate would return to the old per cent; then the use of antitoxin begun again with a great reduction in the death-rate. All of this in the same hospital, in the same epidemic, in the hands of the same physicians—what could be a fairer test? Loeffler's

bacillus is the true one; this has been proven as surely as any problem in medicine. Why, then, does it exist in the mouths of so many healthy people and not cause diphtheria? Why do other bacilli and bacteria behave the same way? First, there is no local lesion to permit their entering. A bad cold; an inflamed tonsil; an abraded surface, then what will result? I have a number of times in my life put my mouth to those of children with malignant diphtheria; I have two or three times put my mouth to tracheotomy wounds in cases of malignant diphtheria; all of these cases but one have died of the disease; I did not have diphtheria. It is true I took some precautions, such as rinsing my mouth with antiseptics. Again, in the mouths of two healthy children highly virulent bacilli have been found in Prof. Escherich's clinic. The assumption that these children owed immunity to anti-toxic properties of their blood-serum was proved correct by experiment. (Gould Year Book, page 733, 1897). He believes that such cases have passed a benign attack without discovery; such we all know is quite common; that the local and general symptoms of a faucial or pharyngeal diphtheria are much more mild than those of other inflammations, and are, as stated above, much less painful, we know to be a fact.

Another argument urged is that immunizing is a failure. Here again the statistics are getting so large as to be difficult to handle. Biggs (Med. News, November 30, 1895) gives us convincing statistics on this point. In the New York Infant Asylum there were 107 cases of diphtheria in 108 days; at this time 224 children received from 100 to 200 units apiece; there was one mild case in the next 19 days; six cases after 30 days. At the second immunization in the same asylum there had been six cases in 12 days; 245 children were immunized. There was one mild case on the twelfth day, four after 30 days. Biggs' report included four other institutions, in all of which there was 1,043 immunizations with three cases in the first 19 days and 13 after 30 days. This is about as good as the disease itself does. Morrill (Boston Med. and Surg. Jour., June 27, 1897) says immunizing injections obviated the closing of the Boston Children's Hospital in the early part of 1895, a contingency which had arisen three times in 1894 before diphtheria antitoxin was known. Is it true that local and general treatment is kept up as in pre-antitoxin days? In speaking for myself, I say no. Where I used to use Loeffler's solution, hydrogen dioxide, salts of iron and mercury, and such severe medication with the mop and atomizer, which I now believe hastened the death of some of my

patients, I now use a simple wash of boric acid or Dobell solution, such as I would use in a case of simple catarrh, and if the patient resists this enough to depress him much, I leave it off and repeat every twelve hours the antitoxin. You may say this depresses too, as it causes pain; you can freeze the part so it causes no pain, or not freeze it either, but carry it to the point of local anesthesia. Local cleansing is of much consequence, no doubt, as cocci and bacteria which develop locally, and upon which diphtheria antitoxin has no effect, must be taken care of; other serums deal with these successfully. **The nervous system suffers much in this disease; the toxins vent their malignancy upon this system, and strychnia with iron is often indicated.** But let us acknowledge for sake of argument that we do use as much local and general treatment as before, but also assert that we save twice as many cases as before — this is surely not against antitoxin.

Diphtheria, in my opinion, is difficult to diagnosticate, even when the seat of the disease is under distinct observation. Typical cases are easy, but there are many atypical; the pulse may be strong or weak; the temperature normal, subnormal or elevated; when subnormal, of course, the circulation is liable to be a pointer; there may or may not be membrane. This may sound strange to some, yet I have seen cases with much redness about the fauces with no membrane followed by all the sequels of diphtheria. One answer to this will be given, that the membrane might have been concealed somewhere; this is possible. Again, the amount of membrane does not indicate a prognosis. I have seen membrane over the fauces, in the pharynx, over the palate, half over roof of mouth, with but little constitutional disturbance. Again, have seen an exceedingly small deposit on one tonsil with malignant symptoms. The location of the membrane is of some prognostic importance: First, if in the larynx, on account of its mechanical obstruction to respiration. Again, if in the nose or naso-pharynx, also on account of its obstruction to breathing, forcing mouth-breathing; and again, on account of the difficulty in carrying out local treatment to correct the effect of the cocci and bacteria not affected by the diphtheria antitoxin.

In conclusion, then, let me advise the use of diphtheria antitoxin in all cases in which there is no doubt of diphtheria, and in all cases of croup, not spasmodic; in all doubtful cases of inflammation of the respiratory tract from the bifurcation of the trachea up; give it early and repeat it as often as necessary. Six thousand units have been given

at one injection, and sixteen thousand units in one case. Give antitoxin serum produced in the United States and Canada; give the concentrated solutions for several reasons: First, I believe it has been demonstrated that the skin eruptions and joint complications which follow the use of diphtheria antitoxin arise from the quantity of the serum, not the antitoxin. Again, a small injection takes less time and is less painful than a large one. The eruption may resemble scarlet fever, measles (without the coryza), nettlerash or a petechial erythema. Why antitoxin does fail sometimes is answered by DeBlasi and Russo-Travile (*Riforma Med.*, No. 170, 1896), who examined 10 cases in which there was pure culture of diphtheria bacillus; the mortality was 27 per cent; 76 cases in which the bacillus was associated with staphylococcus pyogenes; mortality 33 per cent; seven cases in which the diphtheria bacillus was associated with streptococcus pyogenes and Frankel's pneumococcus; mortality 43 per cent; three cases in which the bacillus was associated with bacterium coli, in which the mortality was 100 per cent. In nine fatal cases of diphtheria in which antitoxin had been used, Stokes (*Boston Med. and Surg. Jour.*, December 12, 1895) found pyogenic cocci in the blood of eight. What is an antitoxin unit? It is the least strength which will neutralize ten times the smallest fatal dose of diphtheria toxin in a half-grown guinea pig. How does diphtheria antitoxin act? As yet it is all theoretical. Some say its action is chemical. Behring thinks antitoxin neutralizes the toxin; yet mix them and inject them into a guinea pig, and diphtheria will result. Brieger and Boer have demonstrated that antitoxin is an albuminous body and can be separated from the serum. Some antitoxins will protect from other than their own toxins; thus anti-tetanus serum against snake venom. Bouchard holds that the antitoxin acts not on the toxin to neutralize it, but on the animal body to render it resistant to the action of toxin (*Gould Year Book*, pages 618 and 619). In giving antitoxin I inject it into the outer part of the thigh. I wash my syringe in pure alcohol, then boil it. I wash the part in carbolic acid solution for its cleansing and anesthetic effect; wash it in alcohol, spray the part with chloride of ethyl to anesthetize, pour solution acid carbolic or alcohol on cotton, place it over needle wound, and hold it in place with adhesive plaster; have never seen the least reaction follow.

LOUISVILLE.

Reports of Societies.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, November 18, 1898, Thomas Hunt Stucky, M. D., President, in the chair.

Ovarian Tumors. Dr. L. S. McMurtry: No class of tumors present such variety, both histologically and clinically, as ovarian tumors. It is indeed wonderful what activity the ovary possesses as a producer of atypical tissue. Here we find epithelial growths, retention cysts, connective-tissue tumors, fetal inclusion cysts, and par-ovarian cysts. Among epithelial growths we find the cystic adenomata, which are the classical ovarian tumors.

The varieties in morphology are quite as marked as in histological features. Pushing aside adjacent organs, these growths assume every imaginable form; attaching themselves to other structures, they reach enormous proportions, and by imbibition and pressure exhaust the system to a fatal issue. In reporting the cases illustrated by these specimens, I would direct especial attention to clinical features.

The first specimen is one which has a very interesting clinical history, and so far as my experience goes it is unique. The patient, Mrs. B., of Owen county, Kentucky, is forty-three years of age. She never conceived, and her illness dates from January 1st; at that time she began to suffer with tenderness in the lower part of the abdomen, and was for several weeks confined to her bed, most of the time with symptoms which would indicate that she had fever. This was followed by a gradually developing abdominal effusion. She took to her bed in July last, and was bedridden until she was brought to this city five weeks ago. Soon after going to bed in July the ascites increased and swelling of the feet was observed. When she arrived here five weeks ago she had general edema of the feet, legs, and thighs. The diagnosis of ascites was very easy, as lying upon her back percussion showed that the intestines were floating upon fluid contents of the abdomen, whereas in cases of ovarian cystoma there is dullness over the anterior surface where the tumor lies, and resonance in the posterior lateral regions.

*Stenographically reported for this journal by C. C. Mapes.

The anasarca of the lower extremities was extreme, pitting deeply on pressure. It was a case where one would at once search for pathological conditions in the heart, the kidneys, or the liver. I tapped her and removed about four gallons of the usual straw-colored serum that characterizes ascites. Repeated analyses of the urine were negative in results. After the fluid was withdrawn from the peritoneal cavity, an examination of the abdomen readily disclosed this tumor in the posterior part of the abdomen.

I then (three weeks ago yesterday) made an abdominal section and found this tumor of the right ovary with extensive adhesions lying in the posterior part of the abdomen, adherent and pressing upon the large vessels that course along the spinal column. The area of pressure was so great that both the vena cava and portal system were obstructed. The tumor was densely adherent, but by splitting the peritoneum to a point of cleavage it was enucleated completely. The tumor belongs to the classical variety of cystic adenomata, and is multilocular.

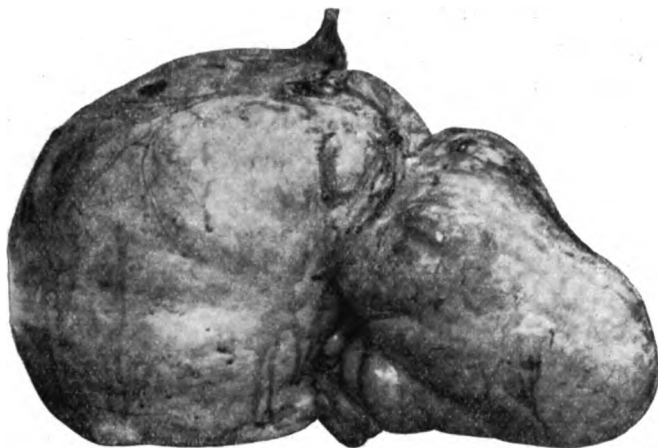


The woman's recovery was quick and complete. The anasarca of the lower extremities rapidly disappeared, and there has been no recurrence whatever of ascites. Her abdomen is entirely flat. Her appetite has returned, and she is rapidly regaining flesh and strength.

This is the only instance I have ever seen of an ovarian tumor producing that array of symptoms which are regarded as pathognomonic of incurable renal and cardiac lesions.

The second case illustrates the general outline of ovarian cystoma. The abdominal contour was so characteristic that I had a photograph made. (See above.)

The patient is fifty-two years of age, and resides in this city about three squares from my house. The tumor was first observed about three years ago, but she avoided all surgical advice until two weeks ago, when she consulted me. I removed the tumor ten days ago. Intestinal adhesions were troublesome, but otherwise the operation was uncomplicated. After the cyst was removed my assistant filled it with water, and the accompanying photograph was made.



The patient has made an easy recovery.

Trephining for Traumatic Epilepsy. Dr. W. O. Roberts: Four weeks ago a patient was sent to me from Green River, Ky., a young man, aged twenty-two years, who fifteen years ago was struck on the head by an arrow loaded at the end which had been shot up in the air, and when it came down struck him on the top of his head, fracturing the skull. He recovered from the injury without any serious consequences, and three years ago began to have epilepsy. He stated that the attacks would come on nearly every day, and that very frequently they would be preceded by pain in the region of the head injury.

Upon examination I found a depression near the center of the top of the head, a little to the right side of the longitudinal sinus.

I advised him to have an operation performed, and told him at the same time that the close proximity of the depression to the central line led me to fear that in removing a button that I would likely open the longitudinal sinus, but I believed the hemorrhage could be controlled without any difficulty. He was anxious to have the operation done.

It was performed at my clinic at the University of Louisville. When the button of bone which I show you was removed, the blood came out also in a great gush. I immediately stuffed a piece of iodoform gauze underneath the bone, and the hemorrhage was stopped instantly. The dressing was removed on the second day, and in removing the pledget of gauze the hemorrhage recurred almost as bad as it was primarily. I repacked the wound with gauze, and on the third day thereafter commenced to remove the gauze gradually, not taking it all out until the fifth day after the first dressing. There has been no recurrence of the hemorrhage, and the man has had no epileptic seizures since the operation.

I show the specimen and briefly report the case simply to state how easily hemorrhage from opening the longitudinal sinus was controlled by gauze packing, much easier in fact than I had anticipated. The man has not had the least elevation of temperature since the operation.

Discussion. Dr. A. M. Vance: I have nothing to say about the case except that the bone is only about one third as thick as it should be, coming from the situation Dr. Roberts has stated. There seems to be a depression in the bone from its under surface.

Dr. J. M. Ray: I remember in opening a mastoid abscess on one occasion I opened the lateral sinus, which was followed by an alarming hemorrhage, giving me quite a fright.

The essay of the evening, "Cirrhoses of the Liver," was read by Joseph B. Marvin, M. D. [See p. 1.]

Discussion. Dr. A. M. Vance: I have had but two cases of cirrhosis of the liver, and both of them got well. One patient, Mr. J. G., was a hard drinker at all times and upon all occasions. Finally he "swelled up," and I tapped him. I do not know how many gallons of water I took away from the peritoneal cavity at different times. The old fellow had a great deal of courage, and understood what the trouble was and stopped drinking. He certainly got well. That has been ten years ago. Shortly afterward he commenced to live an outdoor life, and has been in good health since. The other case was a young negro who was a "handy man" around a gambling house; he was a hard drinker, and also had a history of syphilis. He had ascites, and also had hemorrhages, which almost exsanguinated him. I put him upon active anti-

syphilitic treatment with strychnine to support the heart. He had a great deal of gastric disturbance on account of the treatment, and ascites was extensive. I never tapped him, and he has gotten perfectly well.

These are the only cases I have seen, and both have gotten well. One was syphilitic, the other alcoholic.

Intravenous and intercellular injection of salt water is certainly a wonderful remedy. I believe that probably the best place to put it is to use a trocar and introduce it into the peritoneal cavity. I believe this plan is as effective and safer than if put in a vein. I am sure in the majority of cases a pint introduced in the cellular tissue, especially in women with a weak circulation, will cause suffering. Salt water injected into the rectum and colon is wonderfully effective, and here it can do no possible harm. I have seen people practically brought back to life many times on the operating-table by its employment.

Dr. J. G. Cecil: Dr. Marvin has certainly given us a great deal of food for thought in his paper. There are so many suggestions that it would be difficult to discuss any one of them with satisfaction and all of them not at all. It is a rather surprising fact, and one which he has impressed upon us, that we have all been inclined to look upon cirrhosis of the liver almost entirely as a sequence of alcoholic ingestion; and this being true, it is equally surprising that we do not see more of these cases. My practice has not been very extensive in this class of diseases, yet I have seen a great many men who drink, and know of a great many others who drink, still as I listened to his statements I tried to think of the number of cases in which I had made the diagnosis of cirrhosis of the liver that had come under my personal observation. In private practice they have been very few, and even in hospital practice among men who abuse themselves more than others, those who live irregular lives, cirrhosis of the liver is by no means a common affection. That is a very suggestive point, suggestive that there must be something more than the use of whisky in the development of cirrhosis of the liver.

We have always looked upon this, that it is so arranged in nature that the liver should be the sifter, so as to speak, for the alimentary canal and the body generally, and it has been a surprising fact to me that there are comparatively so few diseases of the liver in the nature of abscesses following diseases in the range of the portal circulation. I have never understood why it was that we have typhoid fever, dysen-

tery, cholera, cholera morbus, diarrheic complaints—that we have so many affections in the range of the portal circulation, diseases in which toxins of all kinds are formed which must go to the liver and which are probably sifted out from the blood by the liver, and yet it seems to escape so many times. It has always been a marvelous fact to me that out of the hundreds and thousands of cases of typhoid fever where we know that toxins are formed which are poisonous because we see their effects in other places, that we do not see their effects in the liver.

I am not ready to accept the idea that has been suggested as to the cause of cirrhosis, because I do not believe it has been fully developed, but I do believe that it is in the right direction. I think observers who are competent to make such studies will in all probability be rewarded by finding toxins which will give us a new idea in regard to cirrhosis. Up to the present time I have not made any special study of the subject myself, and am indebted to Dr. Marvin for the suggestions. Grouping all these suggestions together, and considering the number of men who consume liquor, and the number of diseases which we know load the portal circulation with toxins, and then note the few cases of cirrhosis of the liver, it does look like there must be something more than we have yet discovered in its causation, something more than alcohol and its effects upon the interstitial tissue of the liver itself.

Dr. W. O. Roberts: While Dr. Marvin was talking, like Dr. Cecil, I ran over the cases that had come under my observation, and can recollect but one that was supposed to be cirrhosis of the liver from the symptoms, occurring in a person whom I knew drank no alcoholic stimulants whatever. He, however, was the subject of syphilis, and he had had the disease for two years. This is the only one I can recollect where I felt certain, without a post-mortem examination, that the patient had cirrhosis of the liver.

A word as to the use of the saline solution in cases of great loss of blood. Like the other surgeons present, I have used this frequently and have had most excellent results from it. I have used it three times in typhoid fever, once by intravenous injections, twice by intercellular, and in all three cases the patients recovered. They were the only cases of hemorrhage that I have had occurring in the course of typhoid fever that got well. Before that it had been my experience never to have lost a case of typhoid fever excepting from hemorrhage, and never to have had a case in which there was a hemorrhage without a death. These three cases recovered. In one case, as stated, the injec-

tion was intravenous, in the other two by injection under the breast—all the patients were females.

I would be a little afraid in introducing saline solution into the abdominal cavity through a needle, for fear I might puncture the intestine, and I would be uneasy about the result if I did so. In the cases in which saline injections were used in typhoid fever, the result was just as good when injected into the cellular tissue as when introduced into the vein, and the solution was taken up very rapidly.

Dr. L. S. McMurtry: I do not know when I have heard any subject presented that has been more interesting than that, made this evening, of the advances in the etiology, pathology, and treatment of cirrhoses of the liver. I was interne for a year in the Charity Hospital in New Orleans, and saw there more cases of cirrhosis of the liver than I have seen in my entire professional experience elsewhere.

Dr. Marvin stated, as is the classical statement by every authority upon the subject, that malaria is one of the causes of cirrhosis of the liver, and I would like to ask him in his concluding remarks to give his views as to whether or not climatic influences have any thing to do with cirrhosis of the liver, as we know that warm climates have a great deal to do with the production of hepatic diseases. Is it because malaria is rife in tropical and semi-tropical countries? I have always been skeptical about syphilis as a causative factor in this disease. I think the condition of the liver that is produced by the latter disease is quite different from the pathological condition that obtains in cirrhosis of the liver.

I am impressed with the statement that Dr. Marvin has made about the relation of toxins and bacteria to this disease and other chronic affections, and I am strong in the belief that as our knowledge increases, what he terms "the sphere of infection" will steadily increase in developing the etiology of diseases which as yet have no fixed etiology.

Like the other surgeons who have spoken, I can not forego the opportunity to say a word about the last point he brought out, viz., the use of saline solution. I really do not see how we could get along without the saline solution. In all cases of abdominal section where the patient is exhausted, either from suppuration or from hemorrhage, it has been my routine practice for two years to give normal saline solution by the rectum before the operation is done, and to give it subcutaneously on the table if necessary, and to follow it up afterward. Its influence upon the circulation is so marked that no one can mistake it,

and its sphere of usefulness is not limited to hemorrhages, but also in the impoverished vitality of surgical cases it is invaluable. In cases of operation for ruptured tubal pregnancy, where there is a large quantity of blood rapidly lost from the vessels, it plays a part that is remarkable, and nothing else can take its place. I have no fear upon the point that Dr. Vance mentions, viz., the production of phlegmons by subcutaneous injections; it has not produced any trouble in my experience. By taking ordinary precaution, cleansing the skin thoroughly with alcohol, injections can be continued with impunity. I have introduced four pints into the areolar tissue without causing any trouble, and the solution is taken up with great rapidity.

Dr. W. O. Roberts: In cases of laparotomy, where the patient has lost a great deal of blood, where shock is great, I would like to ask Dr. McMurtry whether he has ever closed the cavity after filling it with normal salt solution? Such is my habit.

Dr. L. S. McMurtry: I have introduced the saline solution into the peritoneal cavity in large quantity under such circumstances. It is taken up with great rapidity, and the patient's pulse at once improves.

Dr. Carl Weidner: I have seen quite a large number of cases of cirrhosis of the liver. I have followed the usual classification as given by Dr. Marvin, and have often questioned whether alcohol plays such an important part, or whether there is some other condition not well understood which is responsible for the disease. I can hardly abandon the idea, however, that alcohol plays a very important secondary part in most of the cases of so-called atrophic cirrhosis. Most of the men that I have known to have this disease, proven by autopsy, were men who used alcohol in large quantities.

The other form, where we have a large liver with the young proliferating connective tissue between the lobules which remains in this form, the so-called biliary hypertrophic cirrhosis, I have seen several such cases, one in a comparatively recent period, and in that instance there was no history of alcoholism; the patient was a lady. It is possible that these cases belong more to the variety which has recently been spoken of as due to infection. If these bacteria have been cultivated and the disease thereby transmitted, then we must admit that the chain of evidence is complete. The question must certainly remain open until this has been clearly demonstrated. There is a large difference in the clinical picture in these cases of cirrhosis. So many symptoms vary in different cases that they are difficult of

explanation. The amount of dropsy, the absence of dropsy for a long time, the absence or presence of jaundice, the tendency to hemorrhage in some cases, are all interesting points.

I have seen several cases where there were large hemorrhages from the bowel and stomach, and autopsy would prove the existence of large varicose veins of the stomach; in some instances the stomach was found filled with blood. It is not necessary to find much of an erosion, however, in these cases to explain the hemorrhage. I have often been greatly puzzled at the course some of these cases took. I have seen cases, one in particular, where the diagnosis of cirrhosis of the liver had been reached by myself and other physicians; the man has been tapped fourteen times; he had every evidence of cirrhosis, and yet there has been no further accumulation of fluid since the last tapping, over a year ago, and he has apparently gotten entirely well. I have been puzzled in this case to understand the condition of things, and am waiting for an autopsy to clear it up, which the man has promised to give me at his death.

As to the effect of alcohol upon the liver, the experiments of French observers show that pigs fed on alcohol for three or four months developed typical cirrhosis of the liver, so we can not discard the views of alcoholic cirrhosis of the older writers.

As to salt solution, I agree that it is exceedingly useful, but think the surgeon will derive more benefit from it in acute troubles than in chronic cases. In cholera and serum diarrhea it is indicated. In chronic cases and in malignant troubles I think it is hardly worth while to use saline injections.

Dr. J. B. Marvin: In regard to the point raised by Dr. McMurtry, my observation is entirely in accord with the suggestion he made, that climatic influence cuts quite a figure in the production of cirrhosis of the liver, and it seems to me extremely reasonable that malaria, especially chronic infection, should result in cirrhosis. I do not see why congestion of the liver lasting for any length of time should not act exactly as any other irritant, causing an increase in the interstitial tissue, and it is a noteworthy fact that the liver is sometimes markedly enlarged in malarial infection; that the hotter the climate the more frequently do you have so-called hepatic disturbances, biliousness, etc. I have seen quite a number of cases of big livers in men and women from the South. We do not see cases of malaria here long enough to say whether it produces genuine cirrhosis of the liver or not.

Cirrhosis of the liver as ordinarily used by almost all authors simply means an overgrowth of connective tissue. Any agent that will produce such overgrowth results in what they call cirrhosis of the liver. It may be infective, it may be specific. Malaria certainly does act on the blood corpuscles, and in remittent fever you have a liver which looks very much like that described as biliary or hypertrophic cirrhosis. Why should not malaria be a factor in this? Most of the authorities who have written upon this subject unfortunately do not live in malarial regions, and those living there do not say much about malarial cirrhosis.

Indian physicians admit that cirrhosis of the liver may occur in quite a number of cases in children. Many of the East Indians are strictly temperate, and those who have investigated the subject there claim to have ruled out alcohol in one class of cases of cirrhosis at least, and state that it does not act as an etiological factor. I am not prepared to admit that alcohol should be entirely ruled out of consideration. Even admitting that these investigations are confirmed, and that the chain is worked out completely, we would have to still recognize alcohol as a very important factor. If you will bear in mind that by cirrhosis of the liver we mean an increase in the production of the fibrous tissue, which does not differ in pathology from fibrous tissue overgrowth in the brain, spinal cord, kidney, or elsewhere, you will see that alcohol must be considered as a factor.

If syphilis is recognized as the most potent and frequent factor in the production of locomotor ataxia, and that it is due to fibrous tissue growth in the posterior columns of the spinal cord, and that the germ of syphilis is found there which acts either by its presence or by its toxins producing destruction of the cells and proliferation of connective tissue, we are constrained to believe that a similar process may take place in the liver. In many cases an increase of fibrous tissue has been found in the brain, and cases of cirrhotic kidney are not infrequent, so I think alcohol will still have to be considered as playing an important rôle in the production of cirrhosis of the liver, although I do not believe alcohol alone is the primary cause of it.

The point mentioned by Dr. Weidner I intended to bring out. The experiment with pigs to which he referred has been reiterated by a great many authors, but experiments have been made by feeding other animals upon alcohol without the production of cirrhosis of the liver. The pig normally has a large quantity of fibrous tissue in its liver

developing after its birth, which is a point that I intended to cover in my previous remarks. The fact that alcohol does not produce an increase of the fibrous tissue in the liver of other animals than the pig, and that a large quantity of fibrous tissue in the liver of the pig is normal, must not be overlooked in considering this subject. It must be remembered that we do not get cirrhosis from the increased amount of fibrous tissue, but from destruction of the liver cells primarily. Experiments have shown that the injection of certain toxins into the horse will produce cirrhosis of the liver.

I have never seen any untoward results from the intercellular injection of normal salt solution.

LOUIS FRANK, M. D., *Secretary.*

NEW YORK ACADEMY OF MEDICINE—SECTION IN ORTHOPEDIC SURGERY.

Meeting of November 18, 1898.

Dr. W. R. Townsend read a paper entitled, *The Prevention of Deformity After Excision of the Knee in Children*. He reported the histories of eight cases seen within the past two years at the Hospital for the Relief of the Ruptured and Crippled in which excision had been performed in early life in other hospitals. All of these cases presented some shortening, the greatest amount being nine and a half inches, the least one half inch. They all presented flexion deformity; the greatest was held at right angle; the least deformity was twenty-five degrees, the average being nearly fifty degrees. Two showed bow-leg deformity and one knock-knee. Two had motion and six were firm. He quoted the views of several orthopedic text-books and the *Treatise of Surgery by American Authors* to show that the operation was indicated only in exceptional cases. The shortening was greatest when both epiphyses of femur and tibia were removed, and in early childhood with extensive disease present it was difficult to remove all diseased tissue without invading the cartilage between the epiphysis and the shaft of the bone. He showed the necessity of long continued after-treatment, either by plaster of Paris or some form of brace if deformity was to be prevented, for many cases of apparent bony union began to present deformity months after the operation, and in some it rapidly increased. The different methods of correcting the deformities were referred to, and forcible correction under an anesthetic was advised

only in those cases where by very slight pressure the flexion deformity could be overcome. In several cases osteotomy or another excision was advised. Braces and operative procedures were advocated for the bow-leg and knock-knee deformities.

He presented two patients who had had excision of the knee in early life to illustrate some points made in the paper. The first patient was a boy fifteen and a half years of age who had an excision performed when he was three years old, for a tubercular osteitis of the right knee. He was admitted to the Hospital for the Relief of the Ruptured and Crippled at the age of six, with slight flexion deformity and two discharging sinuses. The treatment was local and constitutional. The flexion deformity was corrected by manual force under an anesthetic. At the age of ten there were six inches of shortening. At present there were nine and a half inches, six inches in the femur and three and a half in the lower leg. By tilting his pelvis he walks quite well with a seven and a half inch patten, despite the bow-leg on the right side and the absence of motion at the knee. The bow-leg deformity has increased of late years, and is now well marked. This and knock-knee deformity were both liable to occur unless protection was given to the knee for a considerable time after the operation of excision.

The second patient was a boy of nine, whose left knee was excised in Germany. On admission to the Hospital for the Relief of the Ruptured and Crippled, when he was eight years of age, there were sixty-five degrees of flexion deformity and slight motion. The flexion was easily reduced by manual force to twenty degrees with less than ten degrees of motion. His right femur was eleven and one fourth inches long, his left ten, his right leg thirteen inches, his left twelve. The shortening was a trifle over two inches. He illustrated the ordinary form of flexion deformity, and also the fact that bony union did not always occur. He was wearing a Thomas knee brace with straps attached to the foot-plate and these fastened to buckles, and adhesive plasters applied to the leg below the knee. Continual traction was thus made, and the knee was slowly but surely being straightened. It is needless to add that for this traction to be efficacious in reducing the deformity it should be continuous and carried to the full limit.

Dr. R. Whitman added foot-drop, from division of the external popliteal nerve, as a possible disability following excision of the knee. He had seen two cases in which the nerve had been divided, either during excision or else during previous treatment of an abscess. One

of these patients had four inches of shortening and knock-knee, but his most serious disability was caused by the foot-drop, which necessitated a special apparatus. The course of this nerve should be borne in mind in all operations about the knee.

Dr. R. H. Sayre said that operative surgeons were too prone to think that supervision of a case might cease with healing of the wound, whereas they would learn, if they followed their results for several years, that relapses were very frequent in cases that were not protected for long periods of time after operation. This was especially true not only in excision but also in club-foot and various rachitic deformities. In using the Thomas splint with a foot-plate to prevent dropping of the anterior part of the foot he thought that friction and the pressure of the foot would prevent the foot-plate from sliding on the rods, and would thus interfere with the straightening of a bent knee or the relieving of an inflamed knee from pressure. He preferred to keep the toe up by pulling down the heel by a strap fastened to the bottom of the splint and buckled to the back of the heel of the shoe.

Dr. Townsend said that the foot-plate on the Thomas knee brace was intended only for patients who were not walking and when there is no danger of injury being done by jarring. The leather traction strap was used for walking patients.

Dr. A. B. Judson said that these deformities were simple in kind: lateral bending, which caused knock-knee or bow-leg, and antero-posterior bending, producing flexion or hyperextension. The mechanical treatment was also simple, consisting of the application of pressure and counter-pressure in such directions as to oppose the deformity. If the patient was walking, much of the force thus applied laterally would be absorbed in helping to sustain weight instead of being used against the deformity, and the recumbent position or an ischiatic crutch would have to be considered. Patients deformed after excision did not readily submit to tedious mechanical treatment which, if it had been prescribed at first, might have led, in due time, to recovery without deformity. Formerly the established treatment for white swelling of the knee was amputation. Then the high water mark was found in the conservative operation of excision. We now, however, had a more perfect conservatism in mechanical treatment, which avoided the reproach of being mere expectation because it gave to the affected part a new and radically different environment, taking the limb from its laborious position under the weight of the body and giving it pendency and rest.

Dr. V. P. Gibney said that if the case was desperate enough to demand excision, then amputation was the preferable operation. He had been forced to this conclusion by many years of hospital outpatient observation. The high, ungainly pattens supplemented by springs for the legs to protect the ankles did not compare with an artificial limb either practically or cosmetically. He would ask the author of the paper whether a patient with extreme shortening following excision would not be better off in after life if an amputation were done. After the leg was straightened in these cases the patients were sure to return later for treatment. He would amputate and apply an artificial limb, especially when the patient was as old as the fifteen-year-old boy who had been exhibited.

Dr. Townsend said that if the patient referred to were a man instead of a boy, he would advocate amputation. For himself, if he had such a leg and were rich enough to have a new artificial leg every three or four years, he would much prefer to have the leg amputated than to wear such a heavy apparatus.

Dr. Sayre said that if the amputation should be thought best on account of the great shortening of the leg after excision, it would be best to amputate above the knee and so gain the advantage of a movable knee-joint. But it would often be wiser to fasten an artificial limb to the patient's foot when in a position of marked equinus than to do a Syme's or Pirogoff's amputation. He recalled a case in which there had been a failure of growth in one femur with shortening of nine or ten inches, all the joint motions being perfect. The patient wore an artificial leg attached to his foot, and walked with hardly any limp, the difference being noticed only when he was seated, the knees then being at different heights above the floor.

Dr. Judson said that the apparatus referred to was very useful, but that generally it could be improved by making a firmer pocket for the reception of the foot, as it inclined downward in extreme extension. This part could be made not only extremely firm, but also adjustable at will by the use of webbing and buckles. The apparatus could also be improved by making it strong enough to transfer a part of the weight of the body from the anterior part of the foot to the tibia near its tubercle, as was done in the ordinary brace for talipes calcaneus.

Dr. Townsend said that people walked better when the limb was amputated below the knee, but of course this applied to persons with a movable knee. When the femur was shortened several inches and the

knee ankylosed, an amputation of the thigh would have to be done in the lower one third of the femur, and by so doing a movable knee could be obtained.

Elongation of the Femur Following Necrosis. Dr. Townsend also presented a man, fifty-five years of age, a laborer by occupation, whose right femur was two and one eighth inches longer than his left. He walked with scarcely any limp, and wore a shoe raised one and a half inches. The history he gave was that he was perfectly well until the age of twelve, when from some unknown cause a swelling occurred on the lower and inner side of the thigh, and when it broke, some pieces of dead bone came away, and pieces continued to come away for nearly a year. Up to the time of this swelling his two limbs had been of equal length. The lengthening began to be noticed about the age of thirteen, and had reached its maximum when he became of age. The knee-joint had always been freely movable, and was perfectly so to-day. The necrosis affecting the lower end of the femur evidently in this case had produced an irritation and increased growth of the cartilage and bone at the junction of the lower epiphysis to the shaft. Lengthening from this cause had been noticed in osteitis, but this was the greatest amount Dr. Townsend had ever seen. The circumference of the thighs and legs was the same, and there was a small depressed white cicatrix above the inner condyle.

Dr. Sayre said that the suggestion had been made that after excision of the knee the epiphysis of the opposite leg be scratched in order to prevent it from outstripping the affected limb in growth. But the effect of irritation of the epiphysis in the patient exhibited would indicate that artificial irritation might cause increased instead of diminished growth. He recalled a case in which osteitis affecting the hip had caused increase in the length of the limb, but not so much as in Dr. Townsend's patient.

Dr. Gibney said that Dr. James Berry, of Portsmouth, N. H., had analyzed a large number of cases of osteitis of the knee-joint, and in all of them there had been elongation. He wrote a paper upon the subject some ten or twelve years ago, based upon his observations at the Hospital for the Ruptured and Crippled, at which time he was house officer. None of the cases analyzed was treated by the protection apparatus, and a perineal crutch was not used. So we need not lay this elongation to the apparatus now employed.

Dr. Whitman recalled a case similar to that of Dr. Townsend. A man was admitted to hospital for fracture of the femur, which was found to be one and a half inches longer than its fellow. There were several sinuses of indefinite duration. The thigh was amputated because of failure in repair. At the point of fracture the bone was hypertrophied and eburnated, which accounted for the non-union. The lengthening had been due to constant irritation of a fragment of necrosed bone. The most common cause of elongation of bone was specific disease.

Coxa Vara. Dr. Whitman exhibited a boy, seventeen years old, affected with typical left coxa vara of two and a half years' duration. The patient had been under observation for two years. A perineal crutch, after being in use for about eight months, was discarded nine months ago. He had had no other treatment. The trochanter was above Nelaton's line and displaced forward, causing a very noticeable change in its contour. The leg was adducted and rotated outward, and a moderate degree of compensatory knock-knee was present. Flexion of the thigh was checked at one hundred and twenty degrees, but extension was more than normal. These appearances and changes indicated that the neck of the femur was depressed beyond a right angle with the shaft and twisted backward. The patient had been before the Section on May 21, 1897. At that time the actual shortening had been one half inch [see the *American Practitioner and News*, July 24, 1897, p. 59—ED.], which had increased to two and a half inches. Apparent shortening, due to adduction, had increased from one and a half inches to three inches, and motion had become more limited. An operation was advised in order to secure relief from the discomfort caused by lameness and restricted motion. Osteotomy would be done below the trochanter to correct the adduction and outward rotation. In younger subjects with less advanced deformity a cuneiform section should be made from the base of the trochanter to actually restore the proper angle of the neck.

Erythema Nodosum or Neuromata. Dr. S. Ketch presented a man who had applied to the Orthopedic Dispensary for relief from a condition which could not be classified among the affections known as orthopedic, the diagnosis lying between erythema nodosum and neuromata. The patient was a Russian, thirty-five years of age, and a ped-

dlar. He complained of intense pain in the lower extremities, coming on eighteen months ago in the right leg and a few weeks ago in the left. The pain was more severe when he was resting, and was limited to an increasing number of points below the knee, one being at the lower part of the posterior surface of the right thigh. At these places there were slight reddened swellings, pressure on which caused pain altogether out of proportion with the appearances. There was a moderate degree of double flat-foot of which he did not complain, and a slightly varicose condition of the veins. Otherwise he appeared perfectly well, and denied rheumatism and venereal disease.

Dr. Whitman did not think that the pain was due to neuromata, because the swellings did not correspond to the course of any nerve and the appearances were not those of neuromata.

Dr. Sayre said that, as there was some evidence of acute inflammation of the veins, the trouble might have had its origin there.

Dr. Ketch said that acute erythema nodosum might well cause an inflammatory condition of the veins.

Reviews and Bibliography.

The Surgical Complications and Sequels of Typhoid Fever. By WILLIAM W. KEEN, M. D., LL. D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia, etc. Based upon Tables of 1,700 Cases. Compiled by the Author and by THOMAS S. WESTCOTT, M. D., Instructor in Diseases of Children, University of Pennsylvania, etc. With a Chapter on the Ocular Complications of Typhoid Fever by GEORGE E. DE SCHWEINITZ, A. M., M. D., Professor of Ophthalmology, Jefferson Medical College, etc. And as an Appendix, The Toner Lecture No. 5. 386 pp. Price, \$3.00 net. Philadelphia: W. B. Saunders. 1898.

This volume embraces the harvest from a comparatively new field, being the first in medical literature to appear on this subject. Fortunately the subject has been taken up by most competent hands, and little has been left even of gleanings. It is the outgrowth of the Toner lecture of Dr. Keen in 1876, published by the Smithsonian Institute. In his elaboration of the subject the author has been aided by Profs. Welch, Osler, Coplin, and a number of other leading teachers, besides Drs. Westcott and de Schweinitz, whose names appear on the title page.

It is a work not only of great value to the surgeon, but to the physician also, for every physician desires to know all the possible complications of the fever he is treating, so as to be on his guard and apply the remedy at the earliest moment where he is not able to prevent.

Withal he will find the book most easy reading, with its clear, vivid style carrying him along like a novel.

D. T. S.

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SANITATION AND SMALLPOX.

The Westminster Review for November publishes an article by Walter Lloyd, wherein he shows the fallacy of the contention of the anti-vaccinationists that it is "improved sanitation, apart from vaccination, that has brought about the diminution in the spread of smallpox during the present century." An able editorial review of this article in the Boston Medical and Surgical Journal is the basis of what follows.

Mr. Lloyd declares that sanitation has done little if any thing either to destroy the power of infection of smallpox or to prevent its casual introduction developing into an epidemic. Smallpox is the best example of a contagious disease in the nosological category. It spreads not only by bodily contact, but by transmission of its germs through the air. Therefore attempt to control it by such sanitary measures as are usually effective in the management of zymotic or infectious diseases like cholera, typhus, and enteric fever will not avail.

Isolation may do much, as it did in ancient and mediæval times; but "isolation partially failed in Leicester in 1893 and much more markedly in Gloucester and Middlesborough subsequently. The difficulties of effecting isolation when an epidemic prevails are so serious as to be almost insurmountable, as boards of health in the large cities of England have testified."

The author then calls attention to the remarkable decline of smallpox in Glasgow in the early years of the present century, and shows that this decline was in no way due to sanitary improvement, since no sanitary improvements were made during this period. On the other hand, however, the general adoption of vaccination as a prophylactic measure was synchronous with the decline.

The facts relating to the decline of smallpox were recorded by Dr. Robert Watt, of Glasgow, in 1813. The statistics cover thirty years, from 1783 to 1812. In the period prior to and including the year 1800, 19 per cent of all deaths were due to smallpox. The actual figures are: total deaths, 31,088; and from smallpox, 5,958. After 1800 there was a great change; the actual figures for the five periods of six years each are given as follows:

Period	Smallpox death-rate per 100 deaths from all causes.
I. 1783-1788	19.55
II. 1789-1794	18.22
III. 1795-1800	18.70
IV. 1801-1806	8.90
V. 1807-1812	3.90

The fact of the decline in the death-rate from smallpox is thus very apparent, as it was also in the mortality from the same disease in numerous other cities in England and elsewhere during the same period.

Moreover, augmenting the force of these statistics Mr. Lloyd finds that the population of Glasgow more than doubled itself during these thirty years of decline in smallpox fatality (population, 1780, being 42,832; in 1811, 110,000), while the insanitary condition of the town continued to grow from bad to worse. The latter statement he substantiates by abundant quotations from articles published by various writers of repute.

He adds (and this indicates the startling fallacy of the contention of Wallace *et id omne genus*): "Thus while insanitation was hurrying from bad to worse, till the startling conditions described in 1818 and later years were being approached, and while other infectious diseases of infancy were on the increase, smallpox was diminishing by leaps and bounds."

The above facts seem to dispose of the thesis that, as far as one important city in the United Kingdom is concerned, smallpox is a filth disease to be remedied and stamped out by improved sanitation; and the conclusion of Mr. Lloyd seems warranted that the decline in the mortality and spread of smallpox during this century must be due to some other cause or causes than those alleged by the anti-vaccinationists.

If there is any thing proved or provable by the study of smallpox epidemics during the century past, it is that one measure only can limit the ravages of this terrible disease, and that measure is the vaccination of Jenner. They who do not see this, do not want to see it, and might be permitted to keep the noisy tenor of their way were it not that their senseless teachings and perverted statistics are a stench in the nostrils of science, a nuisance in the body politic, and a menace to the human race.

Notes and Queries.

CARBAMIC ACID IN ECLAMPSIA.—K. B. Hofmann (*Centralbl. f. inn. Med.*, July 16, 1898) has examined the cerebro-spinal fluid and urine from a case of eclampsia. The fluid was clear, alkaline, and the specific gravity 1009. With copper sulphate and sodic hydrate it gave a violet color, but no biuret action. It contained a reducing substance the exact nature of which could not be made out. The author found a small quantity of carbamic acid present. The urine obtained a few days later than the cerebro-spinal fluid also contained carbamic acid. An elaborate account of the chemistry is then given, Drechsel's improved method being the one employed. The presence of Drechsel's reaction shows that in the cerebro-spinal fluid in eclampsia there is an abnormal amount of an ammonium salt which in the presence of an alkaline carbonate and carbon dioxide is converted into ammonium carbamate. This must also occur in the blood and other fluids, and therefore a toxemia with ammonium carbamate results. The high percentage of ammonium salts in the urine is in favor of this view. Further investigations are needed as to the presence of this salt in the cerebro-spinal fluid both of those suffering from eclampsia and from healthy individuals.—*British Medical Journal*.

PLACENTAL TUMORS.—Bode and Schmorl (*Arch. f. Gynak.*, vol. lvi, Part 1) met with an instance of a placental tumor with the characters of a fibroma, but resembling also the tumors described as myxoma fibrosum or fibro-sarcoma of the placenta. It was the size of a fist. The patient was a 3-para, and was acutely anemic; the child was 35 cm. long and stillborn, showing beginning maceration. There was a sharp *post-partum* hemorrhage which brought the patient to a condition of collapse, but which was got under control, and the patient made a normal recovery. In cases which the authors have collected there has usually been no symptom pointing to any abnormality; the labors have been generally normal and at term, though sometimes premature; once or twice there were twins. Severe bleeding was the most frequent after-effect. There appears to have been no

permanent deterioration of the mother's health. The placenta in the authors' case presented a groove dividing it into two parts, the larger being normal placenta, while the tumor formed the smaller part. The latter was smooth on its maternal surface and reddish brown; the amnion passed over it in the usual way. On section it appeared nearly homogeneous, and brownish or grayish red. Microscopically the tumor had no proper capsule. Two conditions were distinguishable; on the one hand, a thickened fibrous tissue containing numerous large branching vessels; on the other hand, the parenchyma proper of the tumor; in this round and spindle cells could be observed, rather larger than white blood corpuscles, and some of them branching. The cells lay largely in groups, separated by the fibrous tissue. In places the vessels were so large and numerous as to suggest the condition of angioma. The central parts of the tumor showed in places a mucoid degeneration. The tumor was to be considered, not as a sarcoma, but as a fibroma very rich in cells, or as a fibromyxoma teleangiectodes.—*Ibid.*

MASSAGE OF THE HEART IN CARDIAC SYNCOPE.—M. Tuffier, according to the *Gazette hebdomadaire de médecine et de chirurgie* for November 10th, recently communicated to the Surgical Society of Paris a very interesting case. A young man of twenty-four years had been operated upon for suppurative inflammation of the appendix. The operation at once relieved the condition, but on the sixth day the patient was seized, during the physician's visit, with an attack of cardiac syncope accompanied by total arrest of the circulation. The ordinary measures completely failing to restore respiration, M. Tuffier made an incision in the third intercostal space, and, coming to the heart, took hold of the left ventricle with the thumb and index finger, and subjected it to rhythmical compressions. After a few moments circulation reappeared, and the patient breathed for two or three minutes. The pulse again becoming imperceptible, M. Tuffier repeated the maneuver with the same result. On a third occasion he was unsuccessful and the patient succumbed. An autopsy discovered a clot in the pulmonary artery. The procedure strikes us as original and promising, and in cases of otherwise certain death worthy of trial in the last resort.—*New York Medical Journal.*

DIET IN DIABETES.—Treupel (*Munch. med. Woch.*, July 26, 1898) discusses some points in diet. In diabetes the objects are (a) to lessen the production of sugar, and (b) to promote the consumption of the sugar already present in the fluids of the body. Both these objects are effected by limiting the carbohydrates. Thus a strict diet of albumens and fat should be imposed, but for not longer than four weeks. Then an amount of carbohydrates may be allowed according to the case. Beer should as far as possible be avoided. Pentose and ramnose belong to carbohydrates, which are well borne without increasing the amount of the sugar. Individualization must always be practiced in the treatment of diabetes. The

author then details (a) strict and (b) more generous diets for diabetics. As regards subcutaneous feeding, fat is best adapted for it. After the injection of sugar painful infiltration is often observed, even when sterilized solutions are used. Albuminous solutions are not to be recommended. Artificial foodstuffs are useful in cases of blood diseases accompanied by wasting, in the febrile, and especially in tuberculosis where the ordinary foodstuffs can not be employed. Artificially prepared fats are comparatively little used, but lipanin and some others are readily absorbed. The ordinary fats, as in butter, cream, yoke of egg, are, however, very digestible. Many artificial preparations of carbohydrates are in use. In infants' foods diastase has converted the starch into sugar. It must be remembered that milk, sugar, and other forms (especially honey) contain valuable and soluble carbohydrates, and have the advantage of being cheap. Of all artificial foods, the albuminous are the most important. Somatose, nutrose, eucasin, sanatozen, and sanose are excellent preparations. The two essentials of these albuminous foods are that they should be palatable and cheap. As yet an ideal preparation—that is, one which will satisfy these two conditions—has not been discovered.—*British Medical Journal*.

THE TREATMENT OF CHRONIC RHEUMATISM.—A. Bier (*Munch. med. Woch.*, August 2, 1898) discusses the use of hot air and passive hyperemia in the treatment of this disease. He says that some years ago he used the hot air treatment for chronic rheumatism after having tried it for tuberculous joints. Recently the hot air method has attracted much attention. Undoubtedly it lessens in a striking manner both the pain and stiffness in the joint. Almost the only effect produced by the hot air is the active hyperemia. The author maintains that he can get better results by passive hyperemia. Often the good results are marked, and the details of such a case are given. In rare cases of chronic rheumatism Bier has met with patients who maintained that they obtained benefit from hot air when the passive hyperemia failed. He has only seen himself one patient who was not improved by the latter method. In advanced cases the pain at any rate can be relieved. A further advantage of passive hyperemia is that the method of using it is simpler than in the case of hot air. Both Schuller and Baumler say that they have seen good results from it. Passive hyperemia, if properly carried out, should produce no pain. The leg should be bandaged from the toes up to the effected knee, and then an elastic bandage is applied above the knee over another bandage. Each case must be observed as to how far the passive hyperemia can be borne with safety. It must not cause pain, and if pain is previously present it should be relieved by it. If the joint is painful the method may be used continuously, but the position of the bandage must be changed every twelve hours. In other cases it may be employed either during the day or night. The diseased joint itself is not bandaged. If pain is produced by this treatment it is due to its faulty application.—*Ibid.*

AN ATTACK ON BACTERIOLOGICAL INVESTIGATION.—The *Gazette médicale de Paris* for November 12th recounts that, as it had foreseen, an attempt has been made in the Austrian legislature to suppress bacteriological laboratories, but the Minister of Public Instruction and the chief of the sanitary department have protested against such suppression in the interest of civilization, maintaining that all that is needed is greater care in the management of the laboratories. The attempt to suppress them is quite on a par with English and American antivivisection legislation. We presume the exciting cause of it was the recent unfortunate occurrence of the plague in Vienna as the result of laboratory work.—*New York Medical Journal*.

TYPHOID FEVER AND THE PATERSON WATER-SUPPLY.—An outbreak of typhoid fever of considerable proportions has lately developed in Paterson, N. J., and the Board of Health, having failed to find any other source for the disease, has come to the conclusion that it is due to a contamination of the water-supply and ordered an investigation of the condition of the latter. One would think that in a flourishing city like Paterson the health authorities would keep up such a constant supervision of the water-supply that any contamination would be detected before it had had time to produce such serious results.—*Boston Medical and Surgical Journal*.

THE ACTION OF THE ROENTGEN RAYS ON THE PERSPIRATION.—The *Centralblatt für innere Medizin* for August 27th somewhat ambiguously credits to the *Comptes rendus* (of what, is not stated), 1897, No. 17, an article in which L. Lecercle says that, having repeatedly observed in himself and one of his assistants a decided but transitory dryness of the palm of the hand after long experiments with the Roentgen rays, he has experimented with regard to the matter on rabbits, and found that, under the influence of the rays, the cutaneous transpiration became less and less and finally ceased altogether for a considerable length of time.—*New York Medical Journal*.

VAGINAL PULSATION AS AN EARLY SIGN OF PREGNANCY.—Vaginal pulsation is again brought forward as an early sign of pregnancy by Dr. G. Reusner (*St. Petersburger medicinische Wochenschrift*, 1898, No. 24; *Deutsche Medizinisch-Zeitung*, August 18th), who says that the pulsation of the lateral uterine arteries in the posterior vaginal vault is of a different character from that observed in women who are not pregnant, and also different from that of other arteries in the same woman. The *Zeitung's* abstracter, Dr. C. Freudenberg, remarks that the author does not make it very clear what the difference is.—*Ibid*.

A PRIEST OPENS A SANITARIUM.—A Roman Catholic priest has purchased a site in Jersey City for a sanitarium, which he proposes to construct as a rival of the Keely Cure establishments. He has not made public his

plan of treatment, but he states that after years of close study of the various remedies for inebriety he has devised a method of physical treatment which has proved most efficacious in removing the desire for drink.—*Boston Medical and Surgical Journal*.

A MIXTURE FOR THE TREATMENT OF BURNS.—The *Gazette hebdomadaire de médecine et de chirurgie* credits the following to Lucas-Championnière :

R	Retinol or vaseline, ...	400 parts;
	Oil of thyme, ...	} each, 1 part;
	Oil of origanum, ...	
	Oil of vervain, ...	
	Oil of geranium, ...	
	Sodium naphthol (microcidine), ...	4 to 12 parts.

M.

AN EMETIC FOR CHILDREN.—According to the *Gazetta degli ospedali delle cliniche*, Bagnicki gives to children over six years of age a teaspoonful every half hour, till vomiting is produced, of the following mixture :

R	Powdered ipecacuanha, ...	7½ grains;
	Tartrate of antimony and potassium, ...	100 grain;
	Oxymel of squills, ...	150 minims;
	Distilled water, ...	300 minims.

M.

UTERINE CANCER.—(*Le Progres Medical*):

R	Acidi salicyl., ...	gr. viii;
	Sod. salicyl., ...	3 iii;
	Tr. eucalypti, ...	3 vi;
	Aq. destil., ...	3 vi.

M. Et sig. Three tablespoonfuls in a quart of water for injection every three or four hours.

PERTUSSIS.—(*Indian Lancet*):

R	Tinct. bellad., ...	3 ii;
	Phenacetine, ...	3 i;
	Brandy, ...	3 iii
	Fl. extract chestnut leaves, ...	3 xii.

M. Sig. Ten drops every two to six hours for a child one year old; a child ten years old may be given as much as a teaspoonful.

PROFESSORSHIPS OF MILITARY MEDICINE.—Dr. William H. Devine, late of the medical corps of the army, writes to the editor of the *Boston Medical and Surgical Journal* in advocacy of the establishment of professorships of military medicine in the medical schools, and expresses the hope that next year Harvard will take the lead in the matter. Some of the larger schools had such chairs in the time of the war of secession, and we think it

probable that they will be revived now that we seem to be committed to a policy that will make the maintenance of an enlarged army necessary. *New York Medical Journal.*

FOR HEMICRANIA.—Robin (*Riforma medica*) recommends:

R	Antipyrine, ...	} each 7½ grains;
	Bromide of potassium, ...	
	Hydrochloride of cocaine, ...	1½ grain;
	Caffeine, ...	1½ grain;
	Powdered <i>Paullinia sorbilis</i> , ...	4½ grains.

M. For one powder. Take one powder at the end of the first crisis.

THE TEMPORARY RELIEF OF TOOTHACHE.—Ackland (*Treatment; Therapeutic Gazette*) recommends that the gum be dried and painted with the following formula:

R	Iodine liniment, ...	} each, 1 minim;
	Tincture of aconite, ...	
	Chloroform, ...	10 minims.

M.

CREDE'S SILVER OINTMENT IN THE TREATMENT OF EPIDEMIC CEREBRO-SPINAL MENINGITIS.—In the November number of the *New Yorker medicinische Monatsschrift* Dr. Gustav Schirmer, of Chicago, gives brief notes of nine cases in which he employed inunctions of Credé's silver ointment with success. His method was to use nearly an ounce of the ointment in the course of three days, and then about a third of that amount on the occurrence of a remission.—*New York Medical Journal.*

DEATH OF DR. T. H. HUZZA.—Dr. T. H. Huzza, of Atlanta, Ga., died on December 8th, at the New York Hospital, after an operation for appendicitis. The appendicitis was of traumatic origin, and was due to an injury received a few days previously on a railway train while on his way to New York.—*Boston Medical and Surgical Journal.*

NITROGLYCERIN AS A HEMOSTATIC IN HEMOPTYSIS.—According to the *Clinica moderna*, half a drop of a one per cent alcoholic solution of nitroglycerin in a little water, given every half hour, arrests intractable hemoptysis.

PROFESSOR ROENTGEN LEAVES WURZBURG FOR LEIPSIK.—Professor Roentgen has resigned his appointment at the University of Würzburg, having accepted the post of Professor of Physics at Leipzig.

THE O'DWYER SCHOLARSHIP.—The Trustees of Columbia University have established in the College of Physicians and Surgeons a scholarship to be known as the O'Dwyer Scholarship, in recognition of Dr. Joseph O'Dwyer's professional labors.

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

ENDOMETRITIS.*

BY LEWIS S. M'MURTRY, A. M., M. D.

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A careful study of endometritis, either from the standpoint of the pathologist or clinician, will demonstrate the inaccuracy and disregard of pathological conditions with which this subject is habitually considered. According to the accepted teaching of former times, and in the estimation of many writers and practitioners of the present, this would appear to be a very common affection, whereas as a matter of fact endometritis as a distinctive affection is very rare. By many, every case presenting a discharge from the uterus, not menstrual or malignant, is diagnosed and treated as endometritis, in most instances to the detriment of the patient.

Much of the misapprehension pertaining to this subject has resulted from the classification of endometritis as made in standard treatises and library papers. Nothing could be more misleading than the classification which divides endometritis into cervical and corporeal, a classification based on position and without regard to pathological character. The classification of mucous, hemorrhagic, and purulent is likewise misleading, since these terms relate to symptoms which may be more properly regarded as phases of an inflammatory process rather than varieties of disease. The terms senile, malignant, fungous, hypertrophic, atrophic, congestive, and polypoid relate to a variety of

*Read before the Louisville Medico-Chirurgical Society, December 2, 1898. For discussion see p. 59.

pathological conditions which may be of degenerative, neoplastic, and other characters not essentially inflammatory at all.

In order that this subject may be clearly understood, it is appropriate that we briefly describe the endometrium. It consists of a stroma of fibro-connective and muscular tissues in which glands are imbedded, covered by a single layer of columnar ciliated epithelium. It contains lymphatics and nerves, and the mucous glands are large and numerous. The endometrium is not supplied with separate blood-vessels, but receives its nutrition from the superficial capillaries of the uterus. The ciliated columnar epithelium lines the entire uterus, also the uterine glands, and is continued through the fallopian tubes. As the endometrium approaches the external os it loses its cilia and becomes blended with the pavement epithelium upon the vaginal portion of the cervix. The glands are tubular and narrow, dip down to the muscularis, and constitute a large portion of the volume of the endometrium. These glands are active and maintain a free secretion upon the surface of the membrane, with a plug of thick mucus in the cervical canal. Lymph spaces and vessels are abundant throughout the uterus, lying in the interglandular spaces, around the bundles of muscular fibers and in the serosa, converging into large channels which pass outward in the broad ligaments. The cervical endometrium has a peculiar arbor vitæ arrangement, is more dense than the corporeal, and is attached to the muscularis by looser tissue; it does not participate in menstruation. The normal secretion of the endometrium is alkaline in reaction; the corporeal mucus is clear and watery, the cervical viscid. One important function of the cervix is to close as by a sphincter the uterine cavity; the great function of the corporeal endometrium is to form the decidua and nourish the embryo. A knowledge of this function of the cervix should of itself forbid the much-abused operation of forcible cervical dilatation in virgins. The gland-crypts of the cervix readily become a culture-bed for germs, wherein they may long remain attenuated, and under favorable conditions develop new cultures and activity.

The secretion of the uterine cavity is alkaline; that of the vagina acid. Under normal conditions the acid secretion of the vagina is a protection from pathogenic organisms, and the endometrium is always sterile. Pathogenic cocci and other germs which might enter from adjacent cutaneous surfaces perish in the acid vaginal secretions, which are unsuited for their growth. The reaction of the vagina, however,

may be altered by the presence of inflammatory products so that infection may occur through this route.

The endometrium is one of the most variable tissues of the body. It is subject to alterations that are physiological, so that it is most difficult to establish a normal appearance that is typical. This fact often leads to a mistaken diagnosis of endometritis. The endometrium is suffused with blood during menstruation, undergoes marked disintegration at that time, and is afterward regenerated. During adolescence there is an increase in glandular tissue; during pregnancy this is even more marked, and atrophy supervenes after the menopause. The blood-supply of the uterus is altered by physiological and pathological conditions extraneous to that organ, such as nervous states and wasting diseases. These observations are of the utmost importance in the practical diagnosis and treatment of uterine diseases, and will convince the painstaking observer that the common diagnosis of endometritis, followed by aggressive instrumentation and chemical antiseptics, is a grave error both in diagnosis and treatment.

For the proper consideration of this subject one must have a clear idea of infection and inflammation. Infection is the condition of invasion of tissues by micro-organisms which mechanically or by their products irritate the tissues and disorder their functions. These organisms multiply rapidly, invade new areas, can poison the system, and may be transmitted to other individuals.

The area of infection occupied by the bacteria and their toxins forms a center or focus to which leucocytes migrate, and by the process of sero-plastic infiltration form a limiting wall all around. This latter process is inflammation, being the reaction and resistance of living tissue under the irritation of bacteria and their toxins, and is conservative.

The genital tract is an open canal, extending from the vulva to the peritoneum, and is readily accessible to pathogenic bacteria. During menstruation the rupture of capillaries within the uterine mucosa is of itself a traumatism predisposing to infection. The traumatisms of parturition, of abortion, with retained disintegrating structures, blood-clots, and secretions, constitute the most perilous of all conditions, furnishing ready and prolific soil for infection. Local treatment with instruments and destructive chemical agents and surgical operations are potent factors in preparing the soil for reception and active culture of pathogenic germs. The various diatheses, such

as lithemia, anemia, and similar devitalizing systemic diseases, impair resistance and facilitate infection.

The essential agents of infection are the pathogenic bacteria and their products. The organisms which most frequently invade the female genital tract are the suppurative bacteria (staphylococci and streptococci), the gonococcus, the bacillus coli communis, and the bacillus tuberculosis.

The cervical canal of the uterus is peculiarly exposed to infection by the thinness of the epithelium, the network of its arbor vitæ, and the richness of its lymphatic and vascular supply; and also by the fact that it is always torn in parturition. The fallopian tubes anatomically are continuous with the uterus, communicating directly with the ovaries and pelvic peritoneum. Nature has partially protected the endometrium, both from below and above, by the constriction at the internal os and the utero-tubal constrictions.

When an infection has been established in any part of the female genital tract, it may spread by continuity of mucous tissue or by means of the lymphatics and blood-vessels. The traumatism of parturition evidently open the way for infection through vascular routes, since phlebitis and lymphangitis are often observed. Ordinarily when infection is established in the uterus, the mucosa is first attacked. The endometrium is the initial area of activity and diffusion. In acute pelvic inflammations the endometrium is "the storm-center" of infection. But endometritis does not long maintain its autonomy, for infection extends by continuity of surface to the fallopian tubes, by invasion of the glands to the deep structures, the myometrium is involved, the lymph channels converge to the peritoneum, and general metritis, salpingitis, ovaritis, and peritonitis rapidly mark the extension of the area of invasion. Indeed, it is impossible, either clinically or pathologically, to establish a line of demarkation between endometritis and uterine and peri-uterine inflammation. Hence the impracticability of treating endometritis as a pathological entity; it is the focus of reception and distribution rather than the seat of disease. The term endometritis should be used clinically to indicate an essential part of uterine and peri-uterine infection, rather than a definite lesion separate from contiguous structures.

While it is convenient to designate various infections of the endometrium by the terms puerperal, gonorrheal, traumatic, catarrhal, polypoid, etc., the only working classification is that of acute and chronic.

The limits of this paper and this occasion preclude the discussion of a theme of such magnitude as the treatment of pelvic inflammation. Yet I would submit some deductions as to prevention and treatment, which, though apparently simple, are constantly disregarded with disastrous results that are more frequently seen by the specialist than the general practitioner.

The importance in abortion, parturition, and the puerperium of protecting the endometrium from infection by rigid asepsis is generally recognized. The readiness with which bacteria are conveyed to the receptive endometrium by finger, instruments, and dressings is well known. The traumatism of labor, the exposed vessels of the placental site, and retained blood-clots constitute a soil for propagation and diffusion equaled by no other field. Under these conditions the most trivial manipulation can inseminate a fatal infection. I am sure Dr. Bailey will recall in this connection a case in which he and I were associated wherein a young mother lost her life by violating his instructions and having the nurse administer a vaginal douche with a foul syringe the day after a perfectly normal aseptic delivery.

The puerperal and traumatic infections may extend with terrible rapidity to a fatal result. The infected endometrium pours its septic products through the lymph channels, so that myometritis, lymphangitis, cellulitis, peritonitis, salpingitis, and ovaritis are quickly added to the invaded area. The diffusion of septic products may proceed with such intensity and rapidity that no limiting wall of inflammatory products can be found, and the entire system is poisoned. Suppurative foci may form in the myometrium in less grave forms of acute infection. In the milder cases of acute infection the inflammatory process walls around the infected area. It is the peritonitis which saves life. Dilatation, curettage, and gauze drainage of the endometrium should not be applied in the treatment of these cases of acute infection. This procedure is most perilous. The mouths of vessels are closed; the inflammatory exudate which limits the infected area is fresh and soft; the infection has already passed to the parametria. To open vessels and break through barriers is to spread infection. Gentle irrigation of the endometrium and removal of retained secundines and decomposing clots in the early stages of infection will do good; after that the endometrium should be left undisturbed. The same caution should be observed in the treatment of acute gonorrheal infection as in the infections of puerperal and traumatic origin.

In chronic pelvic inflammation a certain class of cases will be cured by appropriate treatment of the endometrium. These are cases wherein the endometrium has been throughout the focal point of infection, and in which there remain evidences of persistent activity. The size of the uterus, the condition of the mucosa, and the character of the discharge will enable the surgeon to recognize the cases amenable to such treatment. When the infected endometrium has become soft, thickened, and friable, with muco-purulent secretion, its thorough removal will be followed by prompt cure. Before resorting to this operation, however, the appendages should be carefully examined, and if additional foci of infection exist therein, curettage should not be done. If there are lacerations of the cervix, these should be repaired at the same time curettage is done. In properly selected cases the results are prompt and most satisfactory.

The routine use of the curette, and careless, incomplete application of this instrument, constitute the greatest abuse of the minor gynecological operations. When this instrument is used as a routine office-treatment, or is applied without proper preparation of patient, it is fraught with positive and far-reaching danger. Every gynecologist meets constantly with cases of inflammatory diseases of the appendages in which the patient's invalidism dates from such treatment of some simple uterine trouble. Incomplete curettage is quite as dangerous as to do the operation without careful aseptic precautions. To open up lymphatics and veins and tear up the infected mucosa, and only partially remove it, is an invitation for renewed and active infection. This procedure has been likened to raking over a patch of ground after seeds have been scattered over it. When curettage is resorted to, the sharp curette alone should be used. The patient should be prepared the same as for any other operation upon the vagina and uterus. The operation should be done under general anesthesia. After the curettage has been carefully completed, the uterine cavity should be irrigated with hot sterilized water, and an aseptic dressing applied over the vulva. Werth has shown that prompt regeneration of the mucosa takes place after curettage. The uterus is admirably poised by its normal position for drainage. Gauze-packing does not facilitate drainage, and by stimulating contraction of the uterus causes a great deal of pain. Hemorrhage seldom accompanies or follows the operation in sufficient degree to require gauze-packing. No destructive chemical agents should be applied to the endometrium either before or

after curettage. Their antiseptic influence is doubtful, and their local effect is harmful.

In an extensive operative experience I have made it a rule to carefully study specimens, from which I am convinced that endometritis is less common than is claimed. The local treatment of intra-uterine inflammation by medication through the cervical canal with tincture of iodine, carbolic acid, and similar agents in common use, is more harmful than efficacious. If cervical lacerations or diseased mucosa require treatment, this should be applied in a proper surgical manner with thorough aseptic precautions, when the associated congestion and hyperplasia will disappear without other local treatment. Forcible dilatation and curettage should be applied only in cases with positive indications, selected with care and discrimination. Impaired nutrition and systemic disorders should not be disregarded in relation to leucorrhea and other symptoms of inflammation of the uterine mucosa.

LOUISVILLE.

HEMORRHAGE.*

BY A. H. FALCONER, M. D.

Hemorrhage may arise from wounds of arteries, veins, or capillaries, or from wounds of the three combined. In arterial hemorrhage the blood is a scarlet red and appears in jets from the approximal end of the vessel; these jets are synchronous with the pulse-beat. The stream never intermits; the stream from the distal end is darker and not pulsatile. Venous hemorrhage is denoted by a dark hue of blood and its continuous stream. In capillary hemorrhage red blood wells up like water from a sponge. If an artery ruptures in an extremity, there is no pulsation below rupture; if a vein ruptures in an extremity, intense edema occurs; profuse hemorrhage induces constitutional symptoms, and death may occur in a few seconds. Generally after the bleeding has gone on for some time, syncope occurs, which is nature's effort to arrest hemorrhage, for during this time the feeble circulation and the increased coagulability of the blood give time for the formation of a clot. When reaction occurs, the clot may hold or it may be washed away with a renewal of bleeding and syncope; this may be repeated until death occurs.

After a profuse hemorrhage one is intensely pale and of sort of greenish tinge, the eyes are fixed in a glassy stare and pupils widely

* Read before the Louisville Society of Medicine, December 5, 1898.

dilated, respirations are shallow and sighing, skin covered with a cold sweat, legs and arms extremely cold, pulse small, soft, compressible, fluttering or often can not be detected at all, heart very weak. When such a dangerous condition is due to a visible hemorrhage, temporarily arrest hemorrhage by digital pressure in the wound, lower the head, and make compression on the femorals and subclavians so as to divert more blood to the brain, apply artificial heat, inject hypo., brandy, and strychnia ($\frac{1}{8}$ gr.), and as soon as reaction begins, arrest hemorrhage permanently by ligature.

Hemostatics used are (1) the ligature, (2) acupressure, (3) torsion, (4) compression, (5) styptics, (6) the actual cautery, (7) forced flexion of the limbs. The ligatures may be made of silk, catgut, etc., but they must be made aseptic. The ligatures should be about ten inches long; the vessel is drawn out with forceps and separated from surrounding tissues. Some use tenaculum to catch the vessel with, but forceps are best in most cases, because the tenaculum makes a hole through which blood may exude. Tenaculum best used when vessels lie in hard tissues; tie with a reef knot both ends of the vessel. If an artery is incompletely divided, tie on each side of the cut and entirely sever the vessel between the ligatures. If bleeding comes from an artery very close to its point of origin, tie the main trunk as well as the bleeding branch, otherwise the clot will be too short and secondary hemorrhage will be inevitable. Never include a nerve in ligating.

By means of torsion the internal and middle coats are ruptured and the external coats twisted. It is a safe procedure, and is practiced by many surgeons of high standing upon vessels as large as the femorals.

Acupressure is pressure with a pin passed under a vessel (transfixion), leaving a little tissue on each side between the pin and the vessel. A needle can be passed under a vessel and a wire thrown over the vessel and twisted (circumclusion); the needle can be inserted on one side, passed through half an inch of tissue up to the vessel, be given a quarter twist, and be driven in the tissues across the artery (torsocclusion); some tissue is picked up on the needle, folded over the vessel, and pinned to the other side (retroclusion). Acupression is used for inflamed or atheromatous vessels, in sloughing wounds, and where a ligature will not hold.

Compression is either direct or indirect; that is, in the wound or upon its artery of supply; compression and hot water, 120° F., will stop

capillary bleeding, and also that from superficial veins. The knotted bandage of the scalp will arrest bleeding from the temporal artery; long continued pressure causes pain and inflammation. Chemicals are now rarely used. In epistaxis we may pack with plugs of gauze saturated with antipyrine. Bleeding from a tooth socket, pack with styptic cotton, also in an incised urinary meatus.

Cold water or ice acts as a styptic by producing reflex vascular contraction. Hot water produces contraction and coagulates albumin; the temperature should be from 115° to 120° F. A mixture of equal parts of alcohol and water will often check capillary oozing.

The actual cautery is a very ancient hemostatic; it is still used in bleeding after removal of malignant growths, in continued hemorrhage from the prostatic plexus of veins, and to stop oozing after the excision of venereal warts. We are driven to it in the "bleeders," that is, those persons who have a hemorrhagic diathesis, and who may die from having a tooth pulled or from a scratch, etc.

Forced flexion is a variety of indirect compression; it will stop bleeding, but will soon become intensely painful. If we fail to look into a wound, we can not know what is cut; it may be only a branch and not a main trunk. Ligate veins as you would arteries; in a wound of the superficial palmer arch tie both ends of the divided vessel. In a wound of the deep palmer arch, enlarge the wound if necessary in the direction of the flexor tendons, at the same time maintaining pressure on the brachial artery; if the artery can be caught by but can not be tied over the point of forceps, leave the forceps on for four days. If vessel can not be caught by forceps or tenaculum, insert a small piece of gauze in the depth of the wound, over this a larger piece, and keep adding over this bit after bit, each one larger than the one before, until there is a conicle pad, the apex of which is against the extremities of the cut arch and the base well external to the palm; bandage each finger and thumb, put a piece of metal over the pad, also a compress in front of the elbow, flex the forearm upon the arm, wrap the hand in gauze, place the arm upon a straight splint, apply firmly an ascending spiral reverse bandage of the arm, and hang the arm in a sling. The pad is left in place for six or seven days unless bleeding keeps up or recurs. If bleeding begins again, ligate the radial and ulnar. If this fails, we know that the interosseous artery is furnishing the blood, and the brachial must be tied at the bend of the elbow; if this fails, amputate the hand. In primary hemorrhage, if the bleeding

ceases, do not disturb the parts to look for the vessel; if the vessel is clearly seen in the wound, tie it; otherwise, do not, as the hemorrhage may not recur.

When a man has delirium tremens, mania, or when he is a heavy drinker, in these cases, always look for the vessel and tie it. When a person is bleeding to death, arrest hemorrhage temporarily by digital pressure in the wound, and apply above the wound a tourniquet or Esmarch bandage. Bring about reaction, then ligate, but do not operate during collapse if the bleeding can be controlled by pressure. When a branch of a large vein is torn close to the main trunk, tie the branch and not the main trunk; apply practically a lateral ligature. If, after tying the cardinal extremity of a cut artery, the distal extremity can not be found, even after a careful search, enlarge the wound and firmly pack it. In bleeding from the internal mammary artery pass a large curved needle holding a piece of silk into the chest under the vessel and out again, then tie the thread tightly. In collapse due to the puncture of a deep vessel, the bleeding having ceased, do not hurry reaction by stimulants; give the clot a chance to hold; wrap the patient in hot blankets if the condition is dangerous; however, stimulate to save life. In punctured wounds, as a rule, try pressure before using ligature.

After a severe hemorrhage always put the patient to bed and elevate the damaged part if it be an extremity or the head. A clot which holds for twelve hours after a primary hemorrhage will probably hold permanently, but even after twelve hours be watchful and insist on rest. In bleeding from a tooth socket use ice; if this fails, plug with gauze infiltrated with tannin; close the jaws upon the plug, and hold them with Barton's bandage. If this fails, soak plug in Monsel's solution, and lastly use cautery. Pressure on the carotid and ice over the jaw and neck are indicated; it may be necessary to tie the common carotid. A ruptured varicose vein requires a compress bandage from the periphery up and the limb elevated. Pressure above a wound stops arterial hemorrhage, but aggravates venous bleeding. In severe bleeding from the ear, elevate the head and put on ice-bag over the mastoid; give opium and lead acetate, and if blood runs in the mouth, plug the eustachian tube with a piece of catheter.

Subcutaneous hemorrhage demands that an incision be made and ligation be performed. Bleeding from a cut urethral meatus requires the insertion of styptic cotton and application of pressure. Moderate

bleeding from the urethra can usually be arrested by a hot bougie or hot injections; ice to the perineum does good; if these means fail, perform an external urethrotomy and reach the bleeding point.

Vaginal hemorrhage requires the tampon or the ligature. Bleeding from the stomach is treated by the swallowing of ice, giving tannic acid, dose twenty to thirty grains. Never give tannic acid and Monsel's solution at the same time, as they mix and form ink. Opium is usually ordered; acetate of lead, opium, and gallic acid are favorite remedies, and ergot is sometimes used; give no food at all. Hemorrhage from phthisis or bleeding from the lungs is treated by morphia hypo., by perfect rest, dry cups or ice over the affected spot if it can be located, by ergot and gallic acid; gallic acid aids coagulation.

Recurrent hemorrhage, called also consecutive, intermediate or intercurrent, comes on during reaction from an accident or operation; that is, during the first forty-eight hours, and is usually due to a badly applied ligature, or it may result from vascular excitement, or from hypertrophied heart, the jumping artery loosing the ligature. The Esmarch apparatus is not unusually the cause. To lessen the danger of the Esmarch apparatus, use a broad constricting band rather than a tube. In any severe recurrent hemorrhage, open up wound at once and ligate.

Secondary hemorrhage may occur at any time in the period of forty-eight hours after the accident or operation and the complete cicatrization of the wound. Secondary hemorrhage may be due to atheroma, to slipping of ligature, to the inclusion of a nerve, fascia or muscle in the ligature, to sloughing, erysipelas, septicemia, pyemia, gangrene, and to overaction of the heart. If during an operation the vessels are found atheromatous, acupressure had best be used, or pass a thread by means of a curved needle around the vessel, including a cushion of tissue in the loop of the ligature to prevent cutting through the vessel. One great trouble with atheromatous arteries is that their coats can not retract; another trouble is that the ligature cuts entirely through them. If after an operation the pulse is found to be forcible, rapid, and jerking, give aconite, opium, and low diet.

Hemorrhage from the prostate may follow the relief of retention of urine, may be due to stone, inflammation, tumors, etc., or may arise from traumatism, instrumental or otherwise. The color of the urine is usually bright red, but if long retained in the bladder it becomes black and often tarry; the reaction is alkaline; the clots when floated out are large and without definite shape. In micturition the urine is clear or

only a little colored at the beginning, but becomes darker and darker as micturition ends, at which time the flow may consist of almost pure blood. In very small vesical hemorrhage the urine may be smoky; the microscope shows colorless and swollen corpuscles and many polygonal cells. In urethral hemorrhage, blood comes independently of micturition, or blood comes out first, and is followed by pure water. Urethral hemorrhage arises from an acute urethritis, from an inflamed stricture, from the passage of an instrument, or from some other traumatism. Intracranial hemorrhage may be either spontaneous or traumatic; in the vast majority of instances spontaneous hemorrhage comes from the lenticulo-striate artery and produces apoplexy. Traumatism during delivery is a not unusual cause of hemorrhage from the middle meningeal artery.

A traumatic hemorrhage may take place (1) between the bone and the dura (extra dural), (2) between the dura and brain (subdural), (3) in the brain substance (cerebral). Extra-dural hemorrhage arises from the middle meningeal, or more often from one of its branches; it is usually but not always accompanied by fracture; in fact, in some cases not even a bruise can be found. The accident may or may not cause temporary unconsciousness, but even if it does, from this unconsciousness the patient almost always reacts, and there is a distinct period of consciousness between the accident and the lasting coma, the coma being due to a pressure from a continually increasing mass of extravasated blood. If the main trunk or a large branch is ruptured, the period of consciousness is short; if a small branch is ruptured, the period of consciousness is prolonged for hours, or perhaps for days. The pulse becomes frequent, the breathing stertorous, the temperature rises, and in compound fractures the pressure of the escaping blood may force brain matter out of the wound. In treating extra-dural hemorrhage, localize the clot not by the seat of the wound or contusion but by the symptoms entirely, and trephine to find the bleeding vessel.

Subdural hemorrhage is usually due to depressed fracture and rupture of the middle cerebral artery, or of a number of small vessels; the symptoms are identical with those of extra-dural bleeding. The treatment is trephining at the first hemorrhagic point, turning out the clot, ligating the bleeding point, elevating any depression of bone, and draining and stitching the dura with catgut.

Rupture of a sinus usually arises from compound fractures or during a brain operation. The treatment, if the rupture happens from

a fracture, is trephining, enlarging the opening, and pack with one large piece of iodoform gauze, or catch the rent with hemostatic forceps, leaving them in place for three or four days, or apply a lateral ligature and elevate depressed bone. In rupture during operation, control hemorrhage by packing. In prolonged hemorrhage from leech bite, try compression over a plug saturated with alum or tannin. If this fails, pass under the wound a hair-lip pin and encircle it with a piece of silk; if this fails, use the actual cautery. Umbilical hemorrhage in infants requires pressure over a plug containing tannin, alum or gelatin solution. If compression fails, pass hair-lip pins under the navel and apply a twisted suture. If this fails, use the actual cautery.

Rectal hemorrhage requires elevation of the buttocks, insertion of plugs of ice, ice to the anus and perineum, astringent injections (alum), and the internal use of opium and acetate of lead. If these means fail, plug the bowel over a catheter, or insert and inflate a Peterson bag or a colpeurynter, or tampon and use a T bandage. If the bleeding persists, or if a considerable vessel is bleeding, stretch the sphincter, catch the bowel and draw it down, seize the vessel and tie it if possible; if not, leave the forceps in place. Failing in this, the actual cautery must be used. Vesical hemorrhage usually ceases spontaneously, in which case the urine must be drawn off and the viscus be washed out frequently with a solution of boric acid to prevent septic cystitis. If blood-clots prevent the flow of urine, break them up with a catheter or lithotrite and inject vinegar and water, a two-percent solution of carbolic acid, or a solution of bicarbonate of sodium. Perfect quiet is to be maintained, cold acid drinks to be given, ice bags to be put to the perineum and hypogastric region, and opium with acetate of lead, ergot or gallic acid to be given by the mouth. If the hemorrhage is severe or persistent, perform a suprapubic cystotomy. Renal bleeding requires ice to the loin, tannic acid and opium, gallic and sulphuric acid, and perfect quiet. If the bleeding threatens life and the diseased organ is identified, make a lumbar incision and suture or perform a nephrectomy; if not sure which organ is diseased, perform an abdominal nephrectomy. The use of a cystoscope will show from which ureter blood is emerging.

In hemorrhage from the small bowel give acetate of lead and opium, sulphuric acid, or Monsel's salt in pill form (3 grains), allow no food for a time, and insist on a liquid diet for a considerable period. If hemorrhage threatens life, do a celiotomy and find the cause; if

ulcer exists, excise it. If violent hemorrhage follows injury, explore to discover the cause. In bleeding from the large bowel, use styptic injections (ten grains of alum or five grains of bluestone to one ounce of water). If bleeding is low down, use small amounts of solution; if high up, large amounts. Do not use absorbable poisons. In dangerous cases perform an exploratory operation to find the cause.

Severe uterine hemorrhage (unconnected with pregnancy) requires the tampon. Persistent hemorrhage due to morbid growths may require removal of the tubes and appendages, ligation of the uterine and ovarian arteries, or hysterectomy. Post-partum hemorrhage is often controlled by ergot, hot injections, elevation of hips, the introduction of a hand with or without ice, ice over the abdomen, etc.

LOUISVILLE.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, December 2, 1898, Frank C. Wilson, M. D., President pro tem., in the chair.

Hydatiform Cysts: Report of Two Cases. Dr. T. S. Bullock: I present these two cases not from the fact that they are unique, because every doctor who does much in obstetrics sees cases of this kind, but from the fact that they are very rare, occurring only once in every three to four thousand cases, and because of the variety of theories and the mystery that formerly surrounded the etiology and pathology of such conditions—for these reasons I deemed the specimens of sufficient interest to be brought before the Society.

These are instances of what is known as the vesicular mole or hydatiform cyst, which we now know is due to cystic degeneration of the chorionic villi. In the specimens before you the cysts vary in size from a millet seed to that of a small egg. This condition occurs most often in multiparæ between the ages of thirty and forty years. The moles are ordinarily extruded between the third or sixth month of utero-gestation. The symptoms are hemorrhage, the passage of these little cysts, and the distension of the uterus being out of all proportion to the period of gestation at which the patient has arrived. Sometimes

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

they are not extruded, but the term of gestation is very much prolonged, and these villi penetrate the walls of the uterus and cause death from hemorrhage into the peritoneal cavity from rupture of the peritoneal coat, or a portion may be left in the uterine cavity and cause death from sepsis. These cases are interesting from the fact that in olden times each vesicle was supposed by some authors to be a separate fetus; thus Ambrose Pare reports that a certain Countess Margaret gave birth to three hundred and sixty-five children at one time, one hundred and eighty-two males and one hundred and eighty-two females, the odd one being an hermaphrodite. The Catholic priests of olden times administered the rite of baptism to each separate cyst. If that had been carried out in the two cases the specimens of which are before you, the Father would have had a long job in one case, particularly as there are many hundreds of these little cysts.

The first case was seen in consultation with Dr. Borgman, and the mass before you represents but a small portion of the material extruded spontaneously from the uterine cavity.

The second case is one seen at the clinic of the University of Louisville; the woman presented herself last Wednesday with a history which was extremely interesting. She had disturbance of respiration and of circulation, the heart was so rapid and the respiration so disturbed that it might have been suspected, except for the lack of protrusion of the eyeballs, that she was suffering from exophthalmic goitre. She had been losing blood for some time, and the diagnosis of the real condition was not made because she had not been passing any of these little cysts, and while we had seen her only once, we deemed it necessary to empty the uterus immediately. Dr. Anderson introduced a bougie and tamponade, and in six hours this enormous mass was passed from the uterus. The mass contains some of the largest cysts that I have ever seen in a condition of this kind. When these cysts are retained, as already stated, the gestation is prolonged, and then they are nearly akin to cancerous cases, and the patient often loses her life in this way. This woman is still passing some of these little cysts.

The diagnosis is not always easy, the three prominent symptoms being, first, the loss of blood from the uterus; second, enormous distension of the uterus, and third, pathognomonic evidence being the passage of some of these small vesicles. This distension is most marked when the degeneration begins, while the chorion is shaggy. At this time it is called the chorion læve, in distinction from the

chorion frondosum, and I take it this is what has occurred in these two cases, the degeneration occurring while the whole surface of the chorion was covered with these villi.

The indications are, of course, to immediately empty the uterus, but it is very important to be careful how this is carried out; it is better to depend on the tampon and not to introduce into the uterus any instrument, as the uterine walls are very much thinned and there is danger of rupture.

Ordinarily a fetus is found, but in these cases there was no evidence of an ovum, the entire fetal products having degenerated into these vesicles. The condition is recognized as a true mole, and depends entirely upon pregnancy; it can not occur without it.

I was somewhat surprised in looking up the subject that it was so rare in its occurrence. For instance, Mme. Boivin reports only two such cases in twenty thousand pregnancies. Hirst, of Philadelphia, says he has only seen two cases in an experience of ten years. These are the first and only two I have seen. Both women were multiparæ, and the condition, as previously stated, is more likely to occur in such patients than in primiparæ.

Discussion. Dr. W. O. Roberts: Counting the two specimens before us, I have seen three cases of this kind. Some years ago I had a case in a young lady eighteen years of age. She married, and soon afterward her menses stopped; she was thought to be pregnant; she vomited almost constantly, beginning directly after marriage and continuing until the sixth month; she was worn almost to a frazzle, and I decided that it was advisable to bring about a miscarriage. Dr. Scott saw the case in consultation, and he soon became convinced of the same thing. Labor was induced, and she passed an enormous mass like the second one shown by Dr. Bullock.

Dr. J. G. Cecil: I have seen one or two other specimens of this kind, but have never had such a case in my own practice. They are extremely unusual and therefore interesting.

Dr. E. Speidel: I am proud to say that in my limited experience I have had one well-marked case of hydatiform cysts. The woman was the patient of another physician; he could not be found at the time, and I was called in. When he was finally located, I was retained in the case as a matter of courtesy. Another physician, an expert obstetrician, was called in the case later on because of some complication.

Manual dilatation of the os was intrusted to the other physician, and he becoming tired, I was asked to relieve him. I finally got my entire hand into the uterus, and then noticed that I could feel no fetal elements, and upon removing my hand from the uterus I found in the palm of my hand a few small cysts. I stepped aside and showed them to the other physician, and told him I thought hydatiform degeneration of the chorionic villi was the proper diagnosis, and such it proved to be.

Amputation of the Leg for Tuberculous Bone Disease. Dr. W. O. Roberts: A boy was recently sent to me from West Baden, Indiana. He was fifteen years of age, and was very much under size. His mother died of consumption; one brother, he says, has catarrh; his father seems fairly healthy.

This boy four years ago slipped in a creek and hurt his ankle while on his way to school. He went on to school, and three days afterward his ankle began to hurt him very much; it swelled considerably, and the boy has been a cripple ever since.

Some months after he was hurt the doctor lanced a swelling on his leg, and since then his leg has been lanced two or three times, and the discharge has kept up until he was practically worn out. He was greatly emaciated and had no color.

I amputated his leg to-day and show the specimen. The ankle was very much enlarged and firmly ankylosed, the foot twisted outward, and the heel drawn upward. He had an immense ulcer on the inner and anterior part of the leg just above the ankle; there were a number of scars on the anterior part of the leg, and a curve of the tibia could be felt. I amputated at the junction of the middle and upper third. After taking the leg off, I curetted the inside of the bone of the stump and removed all of the medullary substance.

The specimen I present is the tibia with the astragalus attached—a well-marked case of osteo-myelitis with bony ankylosis of the joint.

Discussion. Dr. A. M. Vance: This is certainly one of those cases of acute inflammation of the bone beginning as an osteo-myelitis. There has been a fight between nature and the disease, and it fell to the lot of Dr. Roberts to save the boy's life by amputation. There seems to be an ankylosis between the astragalus and the tibia.

Conservatism about the lower end of the tibia is being less and less observed all the time in chronic bone diseases on account of the perfect prosthetic apparatus we are able to obtain. I am sure the boy will be able to walk better with an artificial limb, and the result will be more perfect than if conservatism had been practiced, and this was really out of the question in this case.

Dr. H. H. Grant: This is a condition which almost certainly was not primarily tuberculous, and probably began simply as an acute inflammation, and it is only unfortunate that the boy was not under the care of Dr. Roberts early enough to have obviated the necessity of amputating the leg so high up. The remaining portion of the medullary canal is probably diseased, and there may possibly be infection of the knee-joint through the medullary canal, so that amputation below the knee will fail to relieve the case.

I have seen a number of cases of this kind, and unquestionably amputation is demanded in a great majority of instances. Operative steps at the ankle-joint, aside from amputation, are usually unsatisfactory; excision of the ankle-joint results in a stiff joint, which is far less satisfactory than an artificial limb, and in many instances where incision and resection are undertaken in these cases it is not successful, and amputation afterward is necessary.

Dr. J. G. Cecil: The specimen is exceedingly interesting, and suggests to my mind this question, which I would like Dr. Roberts to respond to in his closing remarks. In cases of so-called sprain in tuberculous children, as this evidently is, what is the best line of management of the case in the beginning? Dr. Vance will remember a case that was similar to this which resulted in excessive destruction of bone about the ankle under treatment which was deemed the best and most practical at that time. It is a question of interest to those of us in general practice who run across sprains, etc., as to what would be the best line of treatment to adopt in order to prevent such extensive destruction as we see here resulting in conditions which necessitate such an extensive operative procedure.

Dr. W. O. Roberts: In answer to Dr. Grant: This is the second case of the kind that I have operated upon within the last month; both of them presented the same condition of the medullary canal, and in the other one the leg was amputated at about the same point, the medullary canal being thoroughly curetted. It has been my experience that such cases get well without any further trouble. We have to be

careful in cleaning out the medullary canal not to go through the head of the tibia and open the knee-joint. Such an accident has happened in a number of instances, followed by destruction of the joint.

In reply to the question asked by Dr. Cecil: The indication is perfect rest until all symptoms have subsided. Treat all sprains in tuberculous subjects with perfect rest, whereas in non-tuberculous subjects it is my practice to get them up walking about as soon as possible.

The essay of the evening, "Endometritis," was read by Lewis S. McMurtry, M. D. [See p. 41.]

Discussion. Dr. William Bailey: I scarcely think any subject of more interest could be introduced to the Society, and I am obliged to Dr. McMurtry for introducing it and discussing it so well. I want simply to make a few remarks as a general practitioner, and say that I believe there is no more harmful practice than the ordinary office examination of women by general practitioners. I believe for the most part it would be well if the ordinary examining instruments in the general practitioner's room and the examination and treatment of women for so-called endometritis by the general practitioner were abolished. There is no question but in the majority of cases that his treatment does harm rather than good. The opportunities that he has for infecting the woman, if she is not previously so, the manner in which he keeps his instruments in his office, his absolute failure to properly sterilize them, often his own physical condition and the want of cleanliness about his hands—all these, it seems to me, make it a serious question whether the general practitioner ought to be allowed to make such examinations in his office at all or not. For the most part I have no doubt it will be admitted that these troubles are produced by micro-organisms, and also for the most part micro-organism from without it may be. If the conditions are favorable for the development of septic troubles after abortions, etc., I would say that the conditions are lost by which the vagina has been protected before that. The conditions are such that the acid secretions of the vagina do not continue, and hence the possibility for a favorable nidus for the development of bacteria is much greater.

I shall never be old enough to forget the case Dr. McMurtry alluded to, where I left an admirable woman in good condition at four o'clock in the morning, with a negro nurse in charge, who asked me before I left the apartment when she should "give the douche." I charged her,

in the presence of the patient, not for her life to undertake any such thing until I had given her permission, intending that such permission never should be given. When I returned during the afternoon of the next day the woman had had three injections, three vaginal douches, with a fountain syringe which had no doubt been hanging in the closet—not simply in the bath-room but in the water-closet—and had been used indiscriminately for the vagina, for the rectum, and for any other purpose that might be advisable or for which it could be used, and within twenty-four hours from the time of delivery the patient's temperature was over 105° F. and scarcely was below that for the ten days she lived, and with the most complete infection that I have ever seen. As stated by Dr. McMurtry, there were no limitations at all, and no conditions that would even warrant him in curetting the uterus, with a general septic infection that seemed out of all proportion to the local conditions. So I would put my face strongly against vaginal injections under such circumstances and under such surroundings. I do not mean to say that vaginal injections or douches are improper after abortion or after labor if properly administered, but as the general practitioner often finds his patient attended by an ignorant, dirty, filthy nurse, I think in any such case it is better to trust to nature and drainage than to have such douches made. It is a wonder to me that woman is not more often infected than she is. Nature certainly makes considerable provision, as the essayist has stated, by drainage and by natural conditions opposed to infection, until changed condition of the vaginal secretions makes infection more liable. But of all the sources of infection I apprehend most is that coming from gonorrhea. While gonorrhea in the male is not regarded by most men as a matter of great importance, yet to my mind woman suffers much more than she will from syphilis. I believe if I were a woman I would rather take my chances with syphilitic inoculation than with gonorrhea. I think many of the radical operations that the surgeon is called upon to perform upon the female at the present time are dependent upon gonorrheal infection, and I am especially obliged to the doctor for his remarks concerning the protective influences; and I believe that when it comes to treatment of an infected uterus, that it ought to be in skilled hands, not in the hands of the general practitioner, and I for one am ready to give him that opportunity.

Dr. T. S. Bullock: I merely want to say a word in regard to the statement made by Dr. Bailey that he thinks the office chair and office examinations by the general practitioner should be abolished: I thor-

oughly agree with him if the uterus is to be invaded, if you are going to introduce speculums, etc.; but I do not see any reason why these instruments should not be made as thoroughly aseptic in the doctor's office as in the surgeon's operating-room. The point I desire to make is this, I do not see any occasion whatever for the specialist or the general practitioner to introduce any instrument into the vagina in making an examination, but it should be done with the index finger. The bimanual method will give him all the information that he could obtain by the introduction of a speculum, a sound, or by any other method.

In regard to douches after labor: I think they should be absolutely condemned unless there is some indication for their use in the way of fetor to the discharges, or infection exists from the instruments or the hands of the accoucheur; otherwise I think the douche is harmful and should never be employed.

I agree that the introduction of sounds, the curette, etc., in the office of the general practitioner should be thoroughly condemned, and I also thoroughly indorse the statement that when the uterus is to be invaded, no matter where it is done, every precaution should be taken to have every thing as thoroughly aseptic as if the abdominal cavity were to be invaded. But I do believe that there are cases where the curette is one the most useful and valuable instruments that we have in skilled hands.

Dr. Louis Frank: The subject is such an enormous one that it is difficult to know just where to begin in discussing it. I take it one of the main points in the paper is the prevention of endometritis and the prevention of infections generally. I heartily agree with what has been said in this line, although I am inclined to think that instrumentation about the uterus has been condemned rather too much. I do not believe it is the instrumentation itself that does the harm, as I believe in skilled hands any number of sounds can be passed daily, for that matter, without doing any harm; but it is the abrasions about the endometrium, thus facilitating the entrance of micro-organisms, that does the harm.

There is never any occasion to use the sound either in office practice or any other work for the purpose of examination.

As to the curette: It is one of the most valuable instruments that we have, and one we could hardly get along without, and its use should not be confined to cases of endometritis—by endometritis I mean a true inflammatory condition of the uterus itself—but in those cases where we

have a subinvolution, where the organ is large and heavy, curettage for the purpose of getting drainage and reducing the size of the organ by depletion is a very satisfactory procedure.

There is never any indication to introduce gauze into the uterus except for the purpose of drainage, and in cases which are not septic I take it no one would introduce gauze at all. In septic cases it is a wise plan, and one which should always be followed—the introduction of gauze or rubber drain. But it is in those cases of infection after abortion which have existed and continued for some time where the curette proves of most value.

I differ with Dr. McMurtry in regard to packing the uterus in puerperal cases: I would pack in these cases not for the purpose of drainage but for the purpose of shutting off fresh areas from infection, as we would pack to shut off fresh areas in the cavity and prevent infection of the peritoneum. This is equally true in cases following abortion or labor where infection has taken place. In these cases I believe much good can be done by packing tightly with gauze, the gauze being removed and subsequently irrigation being practiced. I have seen cases where the infection was purely localized, and where the infection was not only localized in the endometrium but where infection existed in the cervix and where there were abscesses about the cervix following labor. The indications, of course, in such cases are very clear.

As to the use of the douche subsequent to labor: I do not believe it is ever necessary, and by its use we practically admit that our methods of dealing with the case have been imperfect, except, I will say, in cases where some one else has attended the patient, or where criminal abortion has been induced; but in the ordinary normal cases, or even in abnormal labor, where instrumentation has been used, the douche is never indicated. Its use is but to acknowledge imperfection in our technique, and I would not use irrigation or douches here any more than I would after an abdominal section. If infection already exists, irrigation or douches are absolutely necessary, otherwise there is no indication for such a procedure.

I am sorry that Dr. McMurtry did not limit his remarks, as the field is so wide and there are so many things which might be discussed that to do so intelligently would occupy too much time.

Dr. J. G. Cecil: There is one point in the management of endometritis mentioned by Dr. McMurtry which has not been sufficiently emphasized, and may be properly referred to under medicinal treatment

I mean by that, constitutional or internal medication. Cases of endometritis are sometimes advantageously treated without recourse to topical applications, curettage, etc., and under such circumstances a number of things occur to us, and there is a line of treatment which should be emphasized more than it is: I refer to rest in bed, and especially to the use of purgatives. As we know, nearly all quack medicines which are advertised and used so extensively, if they have any virtue, it lies in the fact that they are purgative in character. There is undoubtedly some good effect which comes from the use of some quack medicines, and this can generally be attributed to the fact that they are purgatives.

I believe in many cases as good or even better effect as far as the final outcome of the case is concerned may be obtained by rest in bed, at any rate limiting the amount of exercise to be taken by the patient suffering from endometritis, putting her in a favorable condition as far as position goes for relief of the congestion and other conditions which obtain, favoring drainage, etc., at the same time prescribing vigorous, active purgation. I believe that rest with purgation, without local or topical applications or injections, with hot water or otherwise, we can get along in many of these cases that are simple in character in a most admirable way.

I have recently seen a case that I recalled to mind, as Dr. McMurtry was reading his paper, in a young courtesan who had from all I could gather indulged in excessive venery. She came to my office, and was suffering with violent congestion of the uterus and its appendages, so that an examination was extremely painful to her, and it looked at first blush as though the young woman had extensive trouble about the appendages especially. I told her to go home and go to bed and obtain rest, especially from the cause of the trouble; I think I also prescribed a warm douche, not relying much upon this, however, but emphasized most strenuously the free use of Rochelle salts. It was a surprise to me to see how rapidly that patient recovered; within three or four days she was entirely well. As far as I know now she has no involvement of the uterus or its appendages, although she probably will have sooner or later if she continues her profession as a prostitute. The result in this case impressed itself upon me very much, and I believe that we will accomplish more by rest and free purgation than by the old-time treatment of applications of tincture of iodine, nitrate of silver, carbolic acid, etc. By the rest and purgation much good can be done, and certainly little harm can result.

LOUIS FRANK, M. D., *Secretary.*

Reviews and Bibliography.

Text-Book of Histology, Including the Microscopic Technic. By DR. PHILIP STOEHR, Professor of Anatomy at the University of Wuerzburg. Second American from the eighth German edition. Translated by DR. EMMA L. BEILSTEIN, Director of the Laboratories of Histology and Embryology, Woman's Medical College of Pennsylvania. Edited with Additions by DR. ALFRED SCHAFER, Demonstrator of Histology and Embryology, Harvard Medical School, formerly of the University of Zürich. With 292 illustrations. 424 pp. Price, \$3.00. Philadelphia: P. Blakiston's Son & Co. 1898.

If the fabled genii could offer the student a choice of wishes, the medical student, contemplating the enormous task that grows apace before him, would express his wish for a return of the days of Methusaleh. This remark is suggested by the fullness and magnitude of this work, which has now to be added to the list of preparatory studies, that is, preparatory to the practice of therapeutics.

The author starts out as if teaching a child its alphabet, even giving directions for dusting the microscope, so that the student may know that he has made the right start. The work then develops with a scientific thoroughness, conciseness, and clearness of expression that declares the master and leaves little indeed to be desired.

During the ten years of its existence it has passed through six revised editions, and has been translated, besides English, into Italian, French, and Russian. The cuts, besides being abundant, are executed in the most superior style, and the whole book, both in its matter and method, is sure to continue to make its impress upon scientific medical thought and teaching.

D. T. S.

The Principles and Practice of Medicine. Designed for the Use of Practitioners and Students of Medicine. By WILLIAM OSLER, M. D., Fellow of the Royal Society; Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University, etc. Third edition. 1181 pp. New York: D. Appleton & Co. 1898.

When an American physician feels called upon to name the medical men and institutions that have notable part in giving his science an honorable position among the nations, he in no case fails to mention Professor William Osler and Johns Hopkins University. Dr. Osler's name is one not only regarded as among the authorities at home, but abroad he has a seat among the judges.

In a work of this size for students it is not to be expected that large additions can be made by any one. With the exception of some progress in treatment, some new remedies introduced, skill and wisdom is to be shown in the indicated use of knowledge already possessed.

The advantage of this work is the authoritativeness that goes with the well-known learning, experience, and discriminating care of the author, who cultivates alike the deepest study and the most rational practice.

In this edition quite a number of the articles have been rewritten, and new matter incorporated in others. The page has been somewhat enlarged and the letter-press improved by the use of a new and clearer type and a better class of paper. In its new dress it stands second to none as a textbook for students and a ready help for practitioners.

D. T. S.

Clinical Lectures on Mental Diseases. By T. S. CLOUSTON, M. D. (Edin.), F. R. C. P., Physician Superintendent of the Royal Edinburgh Asylum for the Insane; Lecturer on Mental Diseases in the University of Edinburgh, etc. Fifth edition. 727 pp. Philadelphia and New York: Lea Brothers & Co. 1898.

The author takes the word from the reviewer by saying in the preface, "a medical book that is coming out in its fifth edition needs no preface." The reviewer can only add that it needs no review. One thing can hardly be doubted, no English-speaking physician would call the list of the highest three authorities on mental diseases without mentioning the name of Dr. Clouston. The judicious fairness, freedom from bias, broad sympathy, and large experience, added to his intellectual gifts, peculiarly qualify him as the teacher he is everywhere held to be.

In his style he is not so clear and so superbly classic as Gowers, but he has a most happy faculty of seeing things as they are and portraying them as he sees them, without warping them to fit rules and systems.

Sometimes he is a little careless and unclear in his style, as when on page 534 he says, "I have seen a senile melancholiac of both sexes suffer intensely from this practice" (masturbation).

In the matter of classification and nomenclature the author recognizes the fact that sufficient headway has not yet been made in pathology to allow of a satisfactory arrangement, and that classification and nomenclature in mental diseases must yet be regarded as to a large extent provisional.

The name of the book itself would prove to many somewhat misleading, for it relates almost wholly to insanity or diseases bordering on it. And in such respect it occupies a place that is not even contested by any other.

D. T. S.

Manual of Diseases of the Skin, with the Analysis of Twenty Thousand Consecutive Cases, and a Formulary. By L. DUNCAN BULKLEY, Physician to the New York Skin and Cancer Hospital, etc. Fourth edition. Revised and enlarged. 362 pp. New York: G. P. Putnam & Sons. 1898.

In the preparation of this volume the author announces his aim to retain the simple and elementary character that marked former editions. The work has been thoroughly revised and much of it rewritten.

We join in the apprehension of the author as to the difficulties of presenting dermatology at all adequately in such short compass. We believe this quite impossible without clinical specimens or elaborate drawings.

From this work one may gain a kind of survey of what he has to learn. For the purpose of reviving knowledge that has become dim it would be found doubtless much more useful, or it might be valuable for the treatment alone, its author being regarded as one of the highest authorities of the country.

The author himself very generously expresses the hope that it may lead to the study of Hyde, Duhring, or Crocker, who he rightly claims are not surpassed by the authors of any country.

D. T. S.

A Compend of Obstetrics. Especially Adapted to the Use of Medical Students and Physicians. By HENRY G. LANDIS, A. M., M. D., late Professor of Obstetrics and Diseases of Women in Starling Medical College. Revised and enlarged by WILLIAM H. WELLS, M. D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic, etc. Sixth edition. Illustrated. 188 pp. Price, 80 cents. Philadelphia: P. Blakiston's Son & Co. 1898.

The call for a sixth edition of Landis' Compend enabled the reviser and editor, Dr. Wells, to make certain needed additions and to leave out certain matters that it was thought might be dispensed with.

The result is that this old favorite comes out much improved and still more deserving of the high esteem in which it has so long been held.

D. T. S.

A Manual of Otology. By GORHAM BACON, A. B., M. D., Professor of Otology in Cornell University Medical College, New York; Aural Surgeon, New York Eye and Ear Infirmary. With an introductory Chapter by CLARENCE JOHN BLAKE, M. D., Professor of Otology in Harvard University. With 110 illustrations and a colored plate. 398 pp. Philadelphia: Lea Brothers & Co. 1898.

This is a short, compact treatise on otology, affording a book of easy reference, and for the use of the general practitioner sufficient for all practical purposes. It is pre-eminently a practical volume.

The author, in an injunction that should reach the laity, urges and emphasizes the importance of treating all diseases of the ear in their earliest stages, as insuring the best chance of preventing the more serious lesions.

The book is well illustrated and the type large and clear; altogether it is a useful book and pleasant to read.

D. T. S.

Illustrated Skin Diseases. An Atlas and Text-Book, with Special Reference to Modern Diagnosis and the Most Approved Methods of Treatment. By WILLIAM S. GATHELL, M. D., Professor of Skin and Venereal Diseases at the New York School of Clinical Medicine, etc. Portfolios I, II, and III. New York: E. B. Treat & Co.

This work is to be issued in quarto portfolios, each comprising twenty-four pages of text, with numerous formulæ and four plates of cases from life reproduced in colors with life-like effect, by a new photographic process. The text is profusely illustrated with numerous black and

white illustrations from photographs from life selected from the author's extensive collection taken in hospital, dispensary, and private practice. The author hopes to complete the work in twelve portfolios. Price, per part, \$1.00. Six portfolios are now ready. The portfolios received bear out in every respect the highest expectations to be drawn from the author's promises. The plates are truly life-like and the descriptions vivid. We predict for it a flattering success.

D. T. S.

A Manual of the Practice of Medicine. By FREDERICK TAYLOR, M. D., F. R. C. P., Physician to and Lecturer on Medicine at Guy's Hospital; Examiner in Medicine at the University of London, etc. Fifth edition. 1002 pp. Price, \$4.00. London: J. A. Churchill; P. Blakiston's Son & Co. 1898.

A work that has reached its fifth edition in England is one that can hardly stand in need of the help of a review more than to say each edition, and notably this, has been kept fully abreast with the latest progress in medicine.

As must needs be in a work of its scope, it is eminently practical. Attention has been mostly devoted to the description of symptoms, to diagnosis, to prognosis, and to treatment. Etiology and pathology have received consideration, but of course not to the extent given them in systematic works. It is altogether a work worthy to take its place among the first order of manuals, and among the more than two hundred thousand physicians in America must find many readers.

D. T. S.

The Phonendoscope and its Practical Application. By AURELIO BIANCHI, M. D., Professor of Preparatory Clinical Medicine and Pathology, Parma, Italy. With 37 illustrations. With Translations of Special Articles by FELIX REGNAULT, M. D., France, and M. ANASTASIADIS, M. D., Greece. Translated by GEORGE BARKER, A. M., M. D., Physician-in-chief of the Chinese Medical Dispensary, Philadelphia, etc. 77 pp. Price, 50 cents. Philadelphia: George P. Pilling & Son. 1898.

This is really a superb advertisement of the modification or improvement of the stethoscope made by Prof. Aurelio Bianchi, of Parma, and called by him the phonendoscope.

It is a highly interesting work on phonendoscopy, being beautifully illustrated on imported plates. The improvement certainly offers claims to investigation.

D. T. S.

Guide to the Clinical Examination and Treatment of Children. By JOHN THOMSON, M. D., F. R. C. P. (Ed.), Extra Physician to the Royal Hospital for Sick Children, and Lecturer on the Diseases of Children in the School of Medicine of the Royal College, Edinburgh. With 52 illustrations. 336 pp. Price, \$3.00. Philadelphia and New York: Lea Brothers & Co. 1898.

The author assures us that the scope of this work is essentially supplementary. It is intended to supply to practitioners and senior students practical and useful information, which, taken along with that contained in a text-book on the practice of medicine, will be a help to them in the study and treatment of sick children.

The subject has been approached from a purely clinical standpoint. In his preface the author pays a high compliment to some American textbooks, especially those of Dr. L. E. Holt and Dr. T. M. Rotch. Under the limitations and restrictions which the author himself imposes, the work is a highly useful one, and especially helpful to one who needs hastily to freshen his knowledge of children's diseases. Above all is the assurance that what one reads here has the stamp of authority. D. T. S.

Foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Military Surgery in the Future ; A Generous Gift ; The Inspection of Food Supplies ; Diphtheria and Elementary Schools ; Cases of Rabies ; Vaccination Statistics ; Phthisis ; A Proposed Epileptic Colony ; Christmas and the Hospitals.

Professor Esmarch has published an open letter, suggesting to the Peace Conference which is to assemble at St. Petersburg certain measures for the mitigation of the horrors of war. The professor says that in future wars the number of wounded will be extremely large, and surgical aid will be extremely taxed, consequently it is desirable that all soldiers be instructed in first aid and furnished with the most necessary bandaging materials. It is also most necessary that every soldier should be made to understand fully the significance of the Geneva Convention in order to prevent ill-treatment of medical officers and wounded men. Furthermore, Professor Esmarch says that an agreement ought to be arrived at that no small caliber bullets should be employed which are not cased either entirely or at least at the point in hard metal, in order that the destructive action of the Dum-Dum bullets used recently may be avoided.

The Council of the Jenner Institute have been offered £250,000 for the purpose of endowing research in bacteriology and biology as bearing upon the causes, nature, and prevention of disease, on condition that its management and control should be vested in seven trustees.

For the supervision of the food imports into the port of London, four inspectors are engaged on the river and three others in the various docks, and their duty is, in addition to the sanitary inspection of the vessels, to overhaul and sample all consignments of food which come under their notice. In addition there are two highly trained special food inspectors who devote their whole time, under the supervision of the medical officer of health, to the examination of meat and other foods. The medical report

for the month of November shows that 104 carcasses of mutton, 459 sides of bacon, 121 crates of rabbits and hares, 900 cases of tinned meat and fruit, 1,205 crates of bananas, 716 barrels of grapes, 9 cases of pineapples, 11 cases of frozen lobsters, and 267 cases of condensed milk were destroyed, besides a large quantity of other goods in smaller quantities.

The Public Health Department of the London County Council has issued a report upon diphtheria and elementary schools. Dr. Murphy in the report says that the schools contribute largely to the prevalence of this disease, and that it is absolutely necessary that the medical officer of health should have free access to schools, where school children can be most readily examined for the prosecution of his inquiries. Dr. Murphy has laid special stress upon this point because the medical officer of health of a London district has reported that the London School Board has addressed to his authority a letter "severely censuring him for examining in school certain children during scarlet fever prevalence among pupils of the school," where, in fact, he found children he had grounds for regarding as possibly infective. The board stated that they would not allow him "or any other medical officer of health to examine children in their schools." Dr. Murphy considers that this subject urgently needs the attention of the Local Government Board and the Education Department.

The Board of Agriculture are not without hopes that before long they will be able to entirely withdraw the muzzling order. During this year there have been but sixteen cases of rabies in the whole of Great Britain, as compared with six hundred and sixty-two in 1895.

Sir Richard Thorne Thorne, in his report to the Local Government Board for 1897-98, is emphatic on the question of vaccination. He points out that the last year for which final observation concerning every child is procurable is the year 1895. That year shows a proportion unaccounted for and necessarily unvaccinated of 24.9 per cent in the Metropolitan area and 19.8 in the rest of England. The percentages reveal a failure to comply with the provisions of the vaccination acts which has been steadily growing for fifteen years, and the probability is that there are now in England and Wales a full third of the children unvaccinated. Thus Sir Richard considers the country is being prepared for widespread epidemics of smallpox such as have been unknown to the present generation. The figures which constitute the Digest of the Vaccination Officers' Returns for the year 1895 show that Leicestershire is the most unvaccinated county in England, showing 76.5 per cent of children "unaccounted for," and the counties of Bedford and Northampton are not far behind. Barrow-on-Soar, a small town in Leicestershire, shows a percentage of 87.3, which is the highest in any town or union of England and Wales. But Northampton, Keighley in Yorkshire, and some eight or ten industrial towns, all run Barrow very close. There are also some "health resorts" which give a percentage of 70 or more of unvaccinated. These are the figures of three years ago, since when things have been rapidly growing worse.

Dr. Crichton Browne, in a discussion on the subject of providing sanatoria for consumptive patients, gave it as his opinion that if the present rate of decrease in phthisis cases continued, the disease would have disappeared in thirty years' time. To maintain the present rate, however, fresh measures would have to be introduced, and of these agencies, the provision of fresh air and healthy sanatoria are among the prime requisites.

It appears that there are between 600 and 700 insane male epileptics in the London asylums, suffering more or less acute forms of epilepsy; to this number may be added about one hundred London patients at present boarded out in other asylums. It is now proposed that those epileptics whose insanity is not continuous should be located in a separate building to be erected on land at Horton; they will here form a working colony.

The annual dinner has just been held of the Medical, Surgical, and Hygienic Exhibitors' Association. The Society was founded in 1895 with the object of bringing together the professional men and the manufacturers of the appliances in constant use in the healing art. In this way highly skilled instrument-makers learn the views of the most experienced physicians and surgeons, and show what they can do in meeting their suggestions. The Association has held two exhibitions, the first attracting 4,500 people; at the second there were between 6,000 and 7,000 visitors, and of the 5,000 registered doctors in London, 3,000 attended. The next show will be in May next, and already most of the space has been let.

The usual Christmas festivities have been held in the London hospitals. At one institution, after breakfast on Christmas morning, one of the house surgeons went round as Father Christmas, accompanied by a student as a Pierrot, who drew a huge trolley filled with presents for each patient. In most wards the men were allowed to smoke, pipes and tobacco being provided. Various troops of singers also gave entertainments.

LONDON, December, 1898.

Abstracts and Selections.

SOME MINOR CAUSES AND CONDITIONS RELATIVE TO THE SPREAD OF TYPHOID FEVER.—Recognizing the fact that the definite and exciting cause of typhoid fever exists in the excreta of those who are ill with this disease, there are yet many variable conditions and circumstances under which the specific poison of the disease spreads from the sick to the well. The most common medium of transmission of the typhoid germ is unquestionably the water-supply, either public or private, and the natural tendency of water to run down hill, carrying these excreta with it from the houses of the sick into wells, ponds, and streams, used as water-sources, explains the frequency of this mode of infection. The serious epidemics

at Lawrence, Lowell, Newburyport, at Plymouth, Pa., Chicago, and Philadelphia were all traceable to this cause and mode of infection. Dr. Ernest Hart rendered a useful service in collecting a very large number of such epidemics and publishing them under the name of "Water-borne Typhoid."

Probably at least three quarters of the extensive epidemics of typhoid fever have been of this character.

Closely allied to the water epidemics are those which are commonly ascribed to the milk-supply, and in these the primary medium of transmission is undoubtedly the polluted water which in some way or other gains access to the milk, either as an adulterant or in its use for the washing of the receptacles in which the milk is stored, or transmitted from producer to consumer, since no evidence has ever been produced to show that typhoid-fever infection could be transmitted to the milk by means of polluted water which the cows had swallowed.

The foregoing methods of transmission having been eliminated, there yet remain other modes which recent observations have shown to be possible. At Lawrence, Mass., after the introduction of a filter for purifying the entire water-supply of the city, and reducing the death-rate from typhoid fever to less than one tenth of its former proportions, and eliminating certain cases among persons who were known to have drunk the water of the canals in the city, there still remained unexplained other cases, some of which appeared to be due to the return of persons from certain summer resorts where the sanitary conditions were seriously at fault and where these persons had contracted the disease. From a statement in the last report of the State Board of Health it appears that an inspection of these resorts, picnic grounds, etc., has been made, which showed that many of these places afforded conditions unusually favorable for the spread of disease, but in many instances the proprietors had shown themselves willing to comply with suggestions as to much-needed improvements. The number of these places in the neighborhood of cities and large towns has greatly increased since the introduction of electric railways running in every direction.

Another source of infection, which has become manifest in recent years, is the ice-supply. Well authenticated cases of typhoid fever have in recent years been traced to the use of ice from ponds and streams polluted with sewage. The need of protection in this direction has shown itself in the trend of public legislation in the past twenty years, and at least three different laws have been enacted in Massachusetts for the protection of the community against the sale of polluted ice.

It is remarkable that thus far the cities and towns of Massachusetts which have taken action under these statutes have been chiefly those of the western part of the State (North Adams, Holyoke, and Worcester), in which the actual degree of pollution has been much less than that of Eastern Massachusetts. The extent of water pollution depends very largely upon density of population, and the greater density is that of the Metropolitan

District. There are ponds still in use as sources of ice-supply in Brighton, Arlington, Lynn, Wakefield, Melrose, and Woburn, upon whose water-sheds the population is from 1,000 to 1,500 per square mile, and into which sewage is constantly running without let or hindrance. The authorities of these places, as well as those of western towns, have power to prohibit the sale of this ice.

Another source of typhoid infection is to be found in those shell-fish which are eaten raw. Many different kinds of shell-fish are eaten raw in England and upon the continent of Europe, but in America the oyster is almost the only kind which is thus used.

The report of Dr. Bulstrode to the Local Government Board of England in 1895 showed conclusively that epidemics of typhoid had been due to the use of oysters from places upon the coast of England which were polluted by sewage. Similar epidemics have also been reported from Connecticut and from Amherst College, due to the same causes. It is not unreasonable, therefore, to suppose that some of the unexplained cases which occur in our cities in the autumn may be due to the eating of raw oysters gathered from sewage-polluted waters. The season of greatest typhoid prevalence coincides with the beginning of the oyster season. The actual intensity of sewage-pollution in the Providence River, noted for its oyster-beds, is far greater than that of any of the sea-coast oyster-beds mentioned in the report of Dr. Bulstrode. The Providence River and Narragansett Bay receive the sewage of about 300,000 inhabitants, living in Providence, Pawtucket, Worcester, and other places contributing to the water-shed of the bay, and this sewage-polluted stream floats to and fro over the oyster-beds at each turn of the tide.—*Boston Medical and Surgical Journal*.

LOCAL ANESTHESIA AND ARTIFICIAL ISCHEMIA.—Braun (*Centralbl. f. Chirurgie*, No. 43, 1898) holds that the arrest of the supply of blood to a limb by Esmarch's method is both a useless and a dangerous adjunct to any plan of producing local anesthesia. In discussing the practice recently advocated by Kofmann of rendering bloodless the seat of a proposed operation and then injecting a solution of cocaine, he asserts that an artificially-produced anemia does not, by itself, affect the organs of painful sensation. The action of cocaine or any other local anesthetic injected into the tissues may, however, be intensified by the condition of anemia in consequence of the arrested absorption of the anesthetic solution. If local anesthesia be absorbed after the simple production of local ischemia, such a result is due not to the cutting off of the blood supply to the benumbed parts, but to a dangerous compression of the sensory nerves.—*British Medical Journal*.

TYPHOID FEVER AT HONOLULU.—Typhoid fever prevails extensively and unnecessarily among the United States troops at Honolulu, dispatches dated November 23d stating that there were over three hundred cases there at that time.

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FIRST PRIZE COMES TO A LOUISVILLE PHYSICIAN.

Beginning early last year the Philadelphia Medical Journal, recently established by some fifty or more of the leading physicians of the United States and put under the editorial management of Dr. George M. Gould, announced an offer of twelve hundred and fifty dollars in prizes for the best ten essays in five different departments of medicine and surgery.

Five of these prizes were of two hundred dollars each for the best essays, and five of fifty dollars each for the next best. Two of these prizes were to be awarded to the authors of the best essays in Obstetrics and Gynecology.

After a painstaking examination by judges selected from among the foremost physicians of Philadelphia, the first prize for this department, \$200, was awarded to Dr. D. T. Smith, of Louisville, formerly one of the editors of the American Practitioner and News and now its principal book reviewer. The pecuniary recompense the award carries, while evidencing the liberality of the Philadelphia Medical Journal, counts for nothing in the worth of such a recognition.

The subject chosen by Dr. Smith for his essay was Moot Points in Obstetrics, in which he developed exhaustively several principles of his own discovery for which he has been contending for several years.

These principles relate to the mechanism of labor, and embrace

"The Uses of the Amnion," "The Cause of Head Presentation," and "The Causes of Rotation."

These are subjects that have been more or less matters of discussion and controversy since the days of Hippocrates and Aristotle, and about the only thing in regard to the explanation of the related phenomena about which obstetricians have been generally agreed is that no explanation hitherto offered has been clearly intelligible or at all satisfactory. That explanations for all these questions, entirely new and doing away altogether with the old, could be offered at this late day and meet with the approval of the leading physicians in one of the foremost medical centers of the world is of itself a triumph of ingenuity and originality, whatever may be the merits of the contribution otherwise. Presenting their claims from the vantage ground attained by this flattering recognition, the principles contended for in the essay can not fail of attention on the part of obstetricians everywhere, and they will no doubt be accorded such consideration and discussion as will settle the question of their merit.

This recognition comes to Dr. Smith quite opportunely. He has now in the press of John P. Morton & Company a book consisting of essays on the same order as that submitted in the Journal prize contest, only that they relate to certain subjects in physics and philosophy that have likewise been "moot points" for centuries, and that have enlisted the first minds of modern history in attempts at their elucidation.

Those who have had the opportunity of becoming acquainted with Dr. Smith's views on these matters through his various brochures and lectures will be greatly disappointed if they do not awaken a lively interest throughout the scientific world.

Original and absolutely independent as a thinker, the Doctor possesses the scientific imagination and attractive style calculated to inspire interest in a production of far less worth than that he is soon to offer the reading public.

Notes and Queries.

FIRST AID ON RAILWAYS.—A recent accident on a French railway brings this subject again into public prominence, and in a very practical way. Surgeons were procured, it seems, without much delay, but considerable time passed before proper surgical appliances, sterile dressings, bandages, antiseptic dusting-powders, solutions, and the like could be secured for the temporary dressing of the wounds. The result of the outcry on the part of the public because of the delay in the treatment of patients, necessitated by the absence of these indispensable articles, led to the issuing of an order by the Minister for Public Works requiring all railway trains carrying passengers to be provided with a certain number of the requisites for prompt surgical, first aid to the injured.

Dr. Estes, the well-known chief-surgeon of the Lehigh Valley Railroad, in a letter published in another column, commenting on a recent editorial utterance in the *Medical News* on the "First Aid on Railways," enforces by statistics from the service of that road how much good has been done in the last ten years by the carrying of "first-aid packets" on all trains. The subject is one of great practical interest for the traveling public now so large in America. It deserves serious attention and discussion, and should lead to the adoption of similar and even more complete precautions by every railroad in the United States. Only medical men can understand all the significance of such preparations for inevitable accidents in the amount of suffering that will be relieved and the number of lives that will be saved. All the weight of medical opinion, then, should be wielded to make railroad companies see that their own interests and those of the traveling public in this matter are one.—*Medical News*.

TREATMENT OF ACNE SIMPLEX.—McKinney (*Maryland Med. Journ.*, November 19, 1898) advocates at least three hot baths each week taken at night followed by cold sponging, and a cold sponge bath every morning for patients who are troubled with acne. A light, nutritious diet, plenty of exercise, and bowels kept regular, with cascara if necessary, are points not to be forgotten in any case. Tonics, cod-liver oil, phosphates, etc., may be required by the particular patient. The remedy par excellence for acne simplex is calcium sulphid. The proper dose is $\frac{1}{2}$ of a grain, twice daily, and this dose should be steadily increased until four such tablets are taken each day. If the taste is objected to, it may be disguised by sugar coating, or the drug may be given in capsules. In case of excessive gastric irritation, it may be desirable to begin treatment with $\frac{1}{10}$ or $\frac{1}{8}$ of a grain. In the acute stages of the trouble, arsenic does no good, and may do actual harm. At each visit it is well for the physician to spend a little time in gently

squeezing out the larger comedones, and curetting the smaller ones with the comedone extractor. The pustules should be lanced at the base in a slanting direction, and the point of the needle or lancet swung around in the abscess cavity to break up its contents. If this be done, so that the pus can be squeezed out without disturbing the overlying crust, the resultant scar will be scarcely noticeable. An antiseptic is needed and can best be applied in the form of a soap containing sulphur or bichlorid of mercury, with which the face can be washed at night, so that the patient may avoid going into the air until the irritation caused by the antiseptic has passed away. If there is too much irritation from the use of the soap or other preparation, any of the semi-solid creams may be rubbed into the skin several times a day. Following are other good antiseptic preparations:

R	Sulphur precip., ...	3i;
	Ether, ...	3ss;
	Alcohol, ...	3iiss.

M. Sig: External use.

The lotion should at first be applied only at night, but after the skin becomes accustomed to it, it may be used advantageously several times a day. The sulphur often causes considerable irritation when first applied, but rarely so much as to cause its discontinuance.

If an ointment is desired, it may be prescribed as follows:

R	Sulphur precip., ...	3i;
	Ung. aquæ rosæ } āā	3ss.
	Lanolin	

M. Sig: External use.

Another good combination is:

R	Potassii sulphid } āā	3i;
	Zinci sulphat	
	Aquæ, ...	q. s. ad. 3iv.

M. Sig: External use.

If the skin remains discolored after the papules and pustules have subsided, an ointment of tar and sulphur, or ichthyol and sulphur, should be used, rubbing it into the skin for a half-hour each night. The use of very strong stimulants, as naphthol, resorcin, caustic potash, etc., is to be avoided, as their effect is often very injurious to the skin.—*Ibid.*

STOKES-ADAMS DISEASE.—Petrucci (*Gazz. degli Ospedali*, September 11, 1898,) records a case of this condition. The patient was a country laborer, aged 52, whose family history was negative. At seventeen years of age he had suffered from slight malarial fever. In 1890 he suffered from influenza for about a week; three years afterward he felt, on returning from work one day, a sensation of *malaise* and extreme prostration, with a feeling of constriction of the chest and dimness of vision. These symptoms were followed by marked frontal sweating. The following day he returned to work, still feeling somewhat weak. The following year he suddenly suffered from severe attacks of syncope, with feeling of oppression. For

some time he was liable to similar attacks, together with vertigo, and some vomiting. On being seen by the author he was found to have a pulse-rate of 14 in a minute, with some slight irregularity, and even occasional intermittence, on the occurrence of which the patient suddenly became pale, and seemed about to faint. On physical examination nothing else of a definite nature was revealed, except some slight pulmonary emphysema. The cardiac apex was in the fifth space, and the sounds somewhat indistinct though free from murmurs. The urine showed nothing abnormal, except that chlorides seemed to be deficient. While under observation the average pulse-rate showed the minimum to be 14 beats, the maximum 24 per minute. Some months afterward the patient died suddenly, apparently from syncope. On post-mortem examination (made under difficulties) a considerable degree of atheroma of the right carotids and coronary arteries was present. The myocardium was pale, and showed foci of chronic myocarditis. The valves were all competent, but showed patches of atheroma on the cusps. The medulla could not be examined. The diagnosis made by the writer was Stokes-Adams disease, a condition to which attention has been drawn more particularly of late years. Its symptoms consist chiefly in those described above. The writer has collected details of the majority of cases described up to the present. It would seem from these that there is a difference of opinion as to the lesions present. According to some, the prevailing condition is fatty degeneration of the myocardium, accompanied more or less by atheromatous change in the coronary arteries, and general arteriosclerosis. On the other hand, some are of opinion that the disease is a neurosis, or possibly due to a disease of the vagus, either nuclear or peripheral. It has even been supposed that the two conditions may be combined, that is to say, that the vascular tissue causes certain nutritive alterations in the medulla, especially the important centres in the floor of the fourth ventricle. The duration of the disease is uncertain, apparently in some instances a few weeks, in others as long as a year. The writer quotes even a lower pulse-rate than that recorded by himself. As to treatment, there seems little that can be done. Injections of caffeine, strychnine, and other cardiac tonics have been tried by the writer. In all cases careful dieting is of great importance.—*British Medical Journal*.

WELL-DIRECTED MUNIFICENCE.—We reported last week the fact that Lord Iveagh, one of the Guinness family of Dublin, had given £250,000 (\$1,250,000) to the Jenner Society of London for the promotion of scientific research tending to the prevention of disease. We can not well imagine where a liberal generosity seeking an outlet for its philanthropic benevolence in something that would confer the greatest lasting good upon mankind could find a more worthy object than this. The prevention of disease and its consequent suffering represents the acme of an enlightened human charity. It is to-day without doubt the best thing for the intending charitable to encourage and foster by their gifts and endowments.

Despite the vast wealth of our country and the number of extremely wealthy men it contains, gifts of this kind have not been as frequent as might have been expected. It is very probable that our wealthy classes do not as yet fully understand how much there lies behind the veil in medicine, and how much might be done in this country, with the genius for research and discovery that our people have, to solve the great problems at present so insistent in practical and scientific medicine. When the realization of the great field for practical philanthropy that is lying open in this matter shall have come to our liberal wealthy classes—it is the beginning of a new year, and we may be pardoned if the spirit of prophecy asserts itself—an era in medicine in America will begin that will eclipse any thing medical history records.

Meantime it would seem to be the duty of members of the profession to make clear the possibilities there are for well-doing in this line to men who may have it in their power, by properly directed pecuniary aid, to anticipate the day when in medicine, as in every thing else, the course of Empire shall take its way westward.—*Medical News.*

MYASTHENIA.—Unverricht (*Centralbl f. inn. Med.*, April 9, 1898,) first gives details of two cases occurring in patients, aged respectively 24 and 26 years. The absence of muscular wasting, and of disturbance of sensation or reflex action, the variability in the symptoms within short periods of time show it to be a disease of at present unknown morbid anatomy. In the first case, paretic symptoms were observed, but they varied so much that the disease could not be said to be a genuine paralysis, but an abnormal fatigue in the muscles. Erb first described this affection, and because ptosis and weakness of the muscles of mastication and of the neck were most marked, he looked upon it as a disease of bulbar symptom complex. Since then cases have been recorded by many observers: Young individuals are mostly affected. Occasionally it comes on acutely, but at other times, months and even years pass before the disease attains its height. Abnormal sensations, paræsthesia, and pains are sometimes observed, but they are never very prominent. The cause is mostly unknown. The main symptom consists in the remarkable proneness of the voluntary muscles to fatigue. Although the muscles innervated from the medulla are mostly first and chiefly involved, this is not always the case. The disease has thus no definite localization. Several repetitions of the same voluntary effort leads to an almost paralytic weakness. Diplopia results from involvement of the eye muscles, and Eulenburg once observed intermitting ophthalmoplegia. Deglutition disturbances may under certain conditions even cause death. In Strümpell's case there were attacks of difficulty in breathing, general restlessness, and marked cyanosis. Sometimes a lasting paralysis supervenes, and sometimes there may be jawdrop from weakness of the masseters. The face muscles may be almost expressionless. The disease may be taken for hysteria. Jolly pointed out a characteristic change in the

electric reactions in the fact that the fatigue noticed after voluntary effort is also present after electrical stimulation. The variation in the symptoms leads to the supposition that this disease is functional in character, and the minutest examination has discovered no lesion after death. Possibly it may be due to accumulation of products causing muscular fatigue. Treatment has not produced any marked effects. Neither strychnine, arsenic, nervine tonics, electricity, nor hydrotherapy have proved reliable. Strümpell proposed the term "asthenic bulbar palsy," Jolly "myasthenia gravis pseudo-paralytica," but Unverricht prefers the name of "myasthenia" alone.—*British Medical Journal*.

DRUNKENNESS AND INSANITY INCREASE.—The Bellevue Hospital authorities have been forced to notice during the holiday season an unusual increase in the number of alcoholic and insane patients. Both wards of this hospital are now crowded. An unusual number of boys have been found intoxicated. There are forty-three patients in the insane pavilion; fourteen persons supposedly insane were admitted in one day. As such a crowded condition of these wards has never been known before, there must be some other reason than the presence of the holiday season.—*Medical News*.

CHRISTIAN SCIENCE DID NOT SAVE.—The faith in Christian Science of the family of Judge J. W. Eller, of Omaha, Neb., is being thoroughly tested. A gasoline stove exploded and burned several members of the family. Two "healers" were called in who prayed at length. When the victims were being told they were not in pain the flesh was dropping from their bodies. Mrs. Eller died, but the other sufferers declared that if they could not be saved through prayer it was not worth while to call for physicians.—*Ibid*.

HRR SLEEP THAT OF DEATH.—A young lady at Hebron, Ind., retired in apparently good health on the evening of Tuesday, the 20th ultimo. Next morning her relatives were unable to awaken her. Her physician pronounced her to be in a trance and expressed the belief she would soon awaken. On Sunday, five days later, it was discovered that she had been dead for some time.—*Ibid*.

AN UNASSAILABLE POSITION.—"No human pen or tongue taught me the science contained in this book, 'Science and Health,' and neither tongue nor pen can ever overthrow it."—Mrs. Eddy, the "mother" of the Christian Science Church.—*Ibid*.

DEATH OF SOLDIERS AT MANILA.—The weekly death-list of the United States troops in the Philippines is as follows: Typhoid fever, two; smallpox, two; accident by drowning, one; by gunshot wound, one; ulcer of the stomach, one.—*Ibid*.

Special Notices.

NEURASTHENIA THERAPEUTICS.—While gout is a comparatively rare affection in this country, the other manifestations of the uric acid diathesis are more frequent. Some authors have termed neurasthenia the American gout, and it seems probable that in many of these cases the chief cause is the accumulation of uric acid in the blood and tissues, and its deficient elimination by way of the kidneys. Although the treatment of this class of patients must be chiefly directed toward improving their general health by appropriate diet, exercise, the use of tonics, chalybeates, etc., it is necessary also to administer remedies which will serve to prevent the retention of uric acid in the system. Among these agents Lycetol is deserving a prominent position, both on account of its uric acid solvent and its diuretic properties. It thus fulfills two of the main indications in the treatment, not only keeping the uric acid in solution, but favoring its prompt elimination. Aside from this, Lycetol is eminently suited for prolonged administration by reason of its agreeable taste and its freedom from gastric or systematic disturbances.

UPRAIDING THE DOCTOR.—Dr. Samuel Wolf, Physician to the Philadelphia Hospital and Neurologist to the Samaritan Hospital of Philadelphia, presents, among others, a case which is of special value at this time. He says: The entire experience of the writer with antikamnia is not confined to the series of cases on which this paper is based, although its previous use had been limited to a few prescriptions, and those in cases where it was given after the usual routine had been exhausted. It is, however, to a striking result in one of these instances that the incentive to investigate more fully is to be largely attributed. A man of 42, in the course of an attack of La Grippe, was enduring extreme torture from the pain of a trigeminal neuralgia. The second ten-grain dose of antikamnia gave such complete and permanent relief that my patient, a druggist of large experience, upbraidingly asked me, "Why didn't you prescribe this remedy before?"

WELL KNOWN—WELL LIKED.—The other day the superintendent of one of the largest city hospitals in this country said to a representative of The Imperial Granum Company, the manufacturers of that reliable dietetic preparation, Imperial Granum: "It is not necessary for your firm to send any one here to tell me about their product, for I have used it both in private and hospital practice for over twenty-five years, and can hardly believe that even the youngest members of the medical profession do not know of the merits of this well known and well liked food for invalids and convalescents."

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THEOLOGICAL INSANITY VS. SCIENTIFIC SANITY.

BY JAMES WEIR, JR., M. D.

When the world was young and when man was in the very beginnings of psychical acquirements, superstition, in all probability, was an unknown factor in his mental organism. As soon, however, as his psychical acuteness transcended and surpassed that of the beasts of the field, the fowls of the air, and the fishes of the sea, and his struggle for existence, therefore, became easier, he had time to notice and to study the natural phenomena which he observed on all sides.

Heretofore he had accepted these phenomena with the unreasoning easiness of a being who had no desire whatever for finding out the nature of things—for tracing effects back to their causes. He early recognized the fact that some of these natural phenomena exercised powerful influences, either for his material good or for his material ill.

The sun, the moon, the stars, the thunder, the lightning, the howling blast of the hurricane, the rain, the hail, the snow and ice of winter, the floods of spring with their resultant effects of water-swept lowlands, all of these natural happenings redounded either to his personal comfort or to his discomfort.

In his psychical immaturity he was at first at a loss to account in any way for these phenomena. But, reasoning finally *a priori*, he soon became convinced that the inciting causes of both beneficent and maleficent occurrences were directed by beings belonging to the same order as himself, only infinitely more powerful in every respect.

For, as he believed, one of these supernatural, supernormal individuals could, and did, ride the storm-driven clouds of the heavens; another walked beneath the billow-tossed surface of the ever-restless sea; another carried in his hands the "far-darting and fiery javelins of imperial Jove," and struck man and beast with "instant and mysterious death;" another leveled the forests with his breath, and swept men, women, and children, bird, beast, and reptile from the face of the earth in one awful cataclysm of death and destruction! What wonder, then, that primitive man personified natural phenomena and endeavored to placate the powerful and, to him, supernatural beings that set them in operation!

That our primitive ancestors did this there can be no question. It was then that the idea of the supernatural came into the mind of man. His limited psychical acuteness could not explain certain phenomena of nature; hence he placed these occurrences above and beyond those natural happenings that he could understand and appreciate. The supernatural originated and exists only in the imagination of man, who created it; it exists nowhere else. And, as we have seen, its origin was founded on an ignorance of natural law, and this ignorance went hand in hand with dominant selfishness.

For the idea of placating the causes of natural phenomena, both the beneficent and the maleficent, was based on self-interest and self-interest alone. Thus we see that the very beginnings of religious belief had their origin in self.

Men soon came to believe that certain of their number were more successful in placating supernatural beings than were others, hence originated the medicine-men—the priests. Naturally these individuals were regarded with great respect and awe, and soon became exceedingly powerful.

Not only was the priest regarded as the medium through which supernatural beings (deities) were to be reached, but he was also looked up to as the only one who could ward off or combat disease; for primitive man considered sickness to be the manifestations of malevolent and powerful deities ever on the watch to enter into, harass, and destroy his body.

This conception of disease began long before the inception of historical times, and has continued, in one form or other, even until the present time. For do we not still have with us Lourdes, holy relics, saints, Christian scientists, exorcisms, etc?

But in all probability this devil-idea or God-idea of disease was most powerful and universal just before, during, and for many years after medieval times, when the priest was deemed the only legitimate physician and the prayers and ceremonies of the Church the only *materia medica* to be used in the treatment of sickness. The priest, knowing full well that his prestige was at stake, bitterly resented any encroachment of true science in the treatment of disease; he held that the religio-science of the Church was God-given, hence absolutely without error. Not only was this a dogma of the Roman Catholic Church, but it was also held to be an incontrovertible *sine qua non* and an incontestable and indisputable fact by the Protestant or Reformed Church. Theological insanity waged a bitter war with scientific sanity whenever the latter advanced a step toward a rational conception and treatment of disease. This fact is a mere matter of history, as I will now endeavor to point out.

Healing by the imposition of commands or the laying on of hands (disease in the shape of devils being commanded to depart) was in great vogue during medieval times. In fact, miraculous powers in this respect are ascribed to medieval saints even to this day. From the smallest beginnings, aye! from no beginnings whatever, the miraculous powers of these so-called holy ones have grown by accretion, pretty much as a snowball when started down hill, until many of them are ranked, as far as miracles are concerned, as powerful as God himself.

In order to show this, we have only to turn to the history of St. Francis Xavier as given, first, in his own letters, second, as brought out in the letters of his contemporaries, and third, as declared in the published works of his Roman Catholic biographers, Tursellinees, Monte, Vitelleschi, Bonhours, Coleridge, and many others.

From Xavier's own letters we gather that he was only a simple priest, who was zealous in the work imposed upon him by his superiors in the Society of Jesus. He tells us that he was greatly handicapped by his ignorance of the language of the tribes of Lower India, to whom he had been sent as missionary; later he makes the same complaint about the language of the Japanese. Yet, in the biographies of Bonhours and Coleridge and Monte and Vitelleschi and many others we are assured that he had the "gift of tongues," and that he used the language of the savage races among whom he ministered spontaneously and without any preparation whatever.

Bonhours says: "He preached in the afternoon to the Japanese in their language, but so naturally and with so much ease that he could not be taken for a foreigner." Says Coleridge: "He spoke freely, flowingly, elegantly, as if he had lived in Japan all his life." Yet Tursellinees, writing a hundred years before Bonhours, notwithstanding the fact that he ascribed many miracles to Xavier, denied him the "gift of tongues." Says he: "Nothing was a greater impediment to him than his ignorance of the Japanese tongues." In the papal bull promulgated at the time of Xavier's canonization "great stress was laid upon the fact that Xavier possessed *the gift of tongues*. It was declared that he spoke to the various tribes with ease in their own languages." Yet in his letters Xavier laments his limitations in the matter of languages, and declares that he spent "many months in attempting to learn them."

This miracle of the "gift of tongues" is only introduced here in order to show how it was deliberately invented by his biographers, and how it was possible for his reputation as a divine healer to originate also in the imaginations of his fellow-religionists. It is solemnly asserted that Xavier "raised the dead, and that he healed multitudes by laying on of hands and by word of mouth." Now let us see how much truth there is in this declaration, for upon it and kindred assertions was founded the theological dogma that the Church (the priests) was all-powerful in the treatment of disease, and that the use of any other instrument in combating sickness was sacrilegious, heretical, and not to be tolerated.

Xavier wrote many letters to his superiors in which he described his labors among the heathen with the utmost minuteness and detail, yet nowhere does he mention the fact that he ever raised any one from the dead, nor do we find mention of any such miracle in contemporaneous documents, many of which are extant, and which tell of every happening in his life. Says Andrew D. White: "Various collections of letters from the Jesuit missionaries in India and the East generally, during the years of Xavier's activity, were published, and in not one of these letters written during Xavier's lifetime appears any account of a miracle wrought by him."

Indeed, Joseph Acosta, who wrote nineteen years after Xavier's death in the desert island of San Chau, and who held him up as an example of a perfect missionary, mentioned this dearth of miracles and declared that success "lies in the missionaries themselves, because

there is now no power of working miracles." In the collection of letters written by the colleagues of Xavier, and published by Emanuel Acosta twenty years after Xavier's death, there is no mention of a single miracle wrought by him.

Joseph Acosta made a careful search of all the records pertaining to Xavier's ministry in India and Japan, and failed to find a single instance of where he raised any one from the dead, or "healed by word of mouth or the laying on of hands." He expressly declares that Xavier wrought no miracles, and then goes on at great length to show why he did not need miracles in the furtherance of his missionary work.

And yet, only a short time after the heroic death of the brave Xavier, we find the miracle-monger busy with his name. Nunez, Provincial of the Jesuits, starts the ball to rolling with these *hearsay* miracles: First, that he had the gift of prophecy; second, that it was vaguely reported at Cape Comorin that he had raised a man from the dead; third, that Father Pablo de Santa Fe had heard that Xavier had given sight to a blind man in Japan. From this small number of *hearsay* miracles the wonderful reputation of this Saint was evolved.

We find Cardinal Monte, in 1622, at the canonization of Xavier, descanting on ten of the principal miracles of the Saint. Monte declared that Xavier "made sea water fresh, so that his fellow-passengers and the crew could drink it; that he healed the sick and raised the dead at various places; that he brought back a lost boat to the ship; that, to punish a blaspheming town, he caused an earthquake and buried the offenders in cinders from a volcano; that, during one of his voyages, he lost overboard a crucifix, which was restored to him after he had reached the shore by a crab," etc. In 1682 we find the one *hearsay* resurrection from the dead at Cape Comorin elaborated by Father Bonhours, into fourteen *bona fide* resurrections, all given with a wealth of details and exact descriptions of circumstances. The one *hearsay* restoration of the blind man of Japan, as related by Father Pablo de Santa Fe, is magnified into hundreds of actual restorations, while the number of sick healed by "word of mouth and the laying on of hands" is legion.

What wonder, then, that the ignorant and superstitious laity should look upon the Holy Fathers as God's ordained physicians; that they should regard the ceremonies of the Church as the only reliable *materia medica* in the treatment of disease! That they did believe this and that the Church took care to strengthen this belief is a matter of history.

Scientific sanity in the treatment of sickness was beaten back and overwhelmed by the great wave of theological insanity, made up, as it was, of dogma, bigotry, and priestly ignorance, superstition, and intolerance! The authoritative historiographers and biographers of the Church, the venerable Bede in his *Historia Ecclesiasticae*, Abbott Samson in his *Miracles of St. Edmund*, Eadmer and Osbern in their *Miracles of St. Dunstan*, St. Augustine in numerous voluminous tones, and many other writers, insisted on the absolute necessity of the Church (the priests) in the treatment of disease.

The dry and withered bones of dead saints and Holy Fathers were everywhere exposed in shrines and upon altars for the veneration of the sick, who, needless to say, were often benefited. We who know the influence of mind on body fully understand that there is no more curative virtue in the jawbone of a dead saint than there is in the jawbone of a dead ass, yet we can appreciate the credulity of the medieval masses that made long and painful pilgrimages to the places where the holy relics were exposed. Have we not, even at the present time, *Our Lady of Salette*, the *Grotto of Lourdes*, the dried bones of *Sts. Cosneo, Damian, Urban*, and hundreds of Holy Fathers? There even remains some efficacy in the *Cemetery of St. Medard*, notwithstanding the dictum of a King to the contrary!

"Pastoral medicine," all through the Middle Ages and for many years thereafter, held in check and forbade the use of scientific medication. The surgeon was considered an enemy of the Church, and was everywhere condemned. The study of anatomy was absolutely forbidden, on the plea that man's body was the temple of his soul, and that it was a sacrilege to pry into its secrets! If the sick man did not recover under the ministrations of the priest, it was manifestly God's will that he should die! Prayer, ceremony, and fetichism (the exposition of holy relics) were the *instrumenta medicamentorum* of the priestly physicians.

Even at the present time fetichism is in vogue to no small extent in Europe. The skulls of the Three Wise Men of the East, who brought gifts to the Saviour, are exposed for veneration in the cathedral at Cologne, and we are told that they "effect many cures." Says White: "But other ecclesiastical bodies in the city were both pious and shrewd, and so we find that not far off, at the church of St. Gereon, a cemetery has been dug up, and the bones distributed over the walls as the relics of St. Gereon and his Theban band of martyrs!" He

adds that at the neighboring church of St. Ursula "we have the later spoils of another cemetery covering the interior walls of the church as the *bones of St. Ursula and her eleven thousand virgin martyrs*; the fact that many of them, as anatomists now declare, are the bones of *men* does not appear to have diminished their power in competing with the other relics in healing efficiency!"

As time passed, however, a healthy skepticism made its appearance, and scientific sanity in the treatment of disease lessened, to a certain extent, the dogmatic and intolerant dicta of theological insanity. The medical lore of the Arabians and of the despised and persecuted Jews were collated by the Emperor Charlemagne and his prime minister, Alcuric. In the thirteenth century the Emperor Frederick II, notwithstanding the fact that he was under papal ban, gathered together a number of Arabic and Greek medical manuscripts and embodied their ideas in his laws. Theological dogma tinctured, to a certain extent, the medical science of the day, yet the old theological insanity and intolerance were greatly lessened by the work of such men as Arnold of Villanova, Bertrand de Gordon, Albert of Bollstadt, Basil Valentine, Raymond Lully, and Roger Bacon. Even from the ranks of the priestly physicians there arose, every now and then, a man whose innate intelligence forbade the use of fetichism in the treatment of disease, and who strove after scientific sanity. Such was Hugo, abbot of St. Denis; such was Notker, monk of St. Gall; and Milo, archbishop of Beneventum; and John of St. Amand, canon of Tournay. Even one Pope was superior to the intolerance of his day, and did something for medical science—Pope Honorious III.

Yet the medical science advocated by these men was so veneered with theological dogma that at the time it did but little good. It served, however, as an entering wedge for greater truths in the days to come. The religio-medical science of the priests was too firmly entrenched to yield without a hard and desperate fight. So we see theological insanity warring with every great truth advanced by scientific sanity. It fought inoculation, vaccination, and anesthetics. It battled with the use of quinia, of cocaine. The priest stood by the bedside of the child-bearing woman and forbade the use of chloroform. Why? Because the Bible says: "In sorrow thou shalt bring forth children." And so the great battle, Theological Insanity vs. Scientific Sanity, was fought; whose was the victory history fully declares.

OWENSBORO, KY.

THE ETIOLOGY AND MANAGEMENT OF PNEUMONIA.*

BY. J. B. MARVIN, A. B., M. D., LL. D.

It occurred to me that the very common and trite subject of pneumonia was extremely interesting just now, and that we might perhaps spend a little time profitably discussing some of the late views in regard to the etiology and management of the disease. Those of you who have watched the death reports for the last three or four weeks must have been struck with the great number of deaths from this cause. I think I am not wide of the mark in stating that the present outbreak of influenza has been more general throughout the city, that there have been a far greater number of cases, than in any previous epidemic. At first I flattered myself that it was not as severe as formerly, but there have been more cases; in some instances the entire family has been down with the disease. But the death-rate from pneumonia began to creep up, and it is out of all proportion to the death-rate from any other disease, and if I am not mistaken exceeds the enormous death-rate from this disease three years ago.

Now I think there are pneumonias and pneumonias, and the fact is forced upon us that we can no longer claim the unity of pneumonia; we must recognize the plurality of it. In looking for one single, specific cause of pneumonia, bacteriologists have retarded the progress, and it is only by independent and numerous observers in different countries failing to find always Frankel's diplococcus or the micrococcus lanceolatus in genuine cases of pneumonia that the bacteriologists were put upon the right track, and now it is recognized that there are a number of separate germs which may be found in pneumonia. And there are at least, as far as my reading goes, four different conditions which we are called upon to differentiate before making a diagnosis of pneumonia. We want to be certain whether we have not a case of diphtheria, or typhoid fever, or influenza, or erysipelas. There are four separate diseases, either one of which may present this local manifestation in the lung which we call pneumonia, and which must be recognized as a very important consideration.

If, for instance, in a family, especially where there are other children, I am treating a case of so-called pneumonia, and that inflammation of the lung is simply a local manifestation of diphtheria, I am doing a

* Read before the Louisville Medico-Chirurgical Society, January 13, 1899. For discussion see p. 101.

serious injustice to the balance of the family in not making a correct diagnosis. I believe it is only by bacteriological methods that we can differentiate between these different varieties of pneumonia. It is the same way with typhoid fever; we may have a pneumonia early or late during the course of the disease. Typhoid fever may start with a chill, with pain in the side, with all the classical, clinical symptoms of pneumonia, and it is only by a bacteriological examination that we can make the distinction between pneumonia and typhoid fever. Then the bacteriological examination, instead of revealing the so-called Frankel's germ or pneumococcus, may show the Eberth bacillus.

I believe the latest teaching in bacteriology bears me out in the statement that we must recognize the plurality of pneumonia, and in any case we ought to consider the prevailing disease; that, during an epidemic of grip, we ought to look out for grippal pneumonia. If diphtheria is prevailing, look out for diphtheria; and the same thing applied to typhoid fever and erysipelas; and we must call to our aid microscopical and bacteriological examination to prove the diagnosis, as the treatment must be radically different.

Next, the protection of the others: I believe that a diphtheritic case of pneumonia may manifest itself in the second case as true diphtheria, and of course we ought to adopt methods for destroying the sputum. In those cases of pneumonia which partake of typhoid fever, with local manifestations of the latter disease, we ought to disinfect and destroy the stools, urine, etc.

That leads to another point, viz: the management. Like everybody else, I suppose I have been led to believe that if we had a specific cause, of course there must be some definite and specific line of treatment. In view of the foregoing statements, there can not be any treatment for pneumonia according to a set and fast line. I have seen quite a number of such cases. Certainly we must recognize the fact that it is the individual and not the disease that we are treating; next, that if the disease depends upon any one of these causes the treatment may be very different. Another point, I do not believe there is any medicine or method under the sun by which we can influence in the slightest the course of the disease. I do not believe we can cut it short.

That leads me to make a few remarks in another line: I have seen several cases in this outbreak where a man would have a chill, a sharp pain in the region of the nipple, marked dyspnea, a rapid pulse, quick

breathing, and all of the classical clinical symptoms of pneumonia, where, under the influence of an hypodermatic injection of morphine and atropine and the ice pack, the temperature would go down inside of twelve hours and no more pneumonic symptoms would supervene. Did I cut a pneumonia short? I do not believe so. Many of these cases were called pneumonia. I have seen one case in which a man had double pneumonia. I saw him in the preliminary attack, with rapid pulse, rapid breathing, dyspnea and fever, where in twelve hours that man was out of all danger. The temperature came down to normal, and nothing remained but a little dullness on percussion at the base of the lung, with a little rough breathing. That was certainly not croupous pneumonia. I use the ice pack to the exclusion of all other external applications. I do not believe, however, that it is a specific, but I do believe that it more rapidly controls the pain and the temperature than any other single agent we have; but I certainly do not believe any genuine case of pneumonia can be cut short by this or any other means.

Another thing has impressed me, viz: that the greatest danger that can befall an average case of pneumonia is the meddlesome doctor. If I had pneumonia I would want the family nurse and doctor to make me comfortable and not meddle with the course of nature. I am satisfied that ordinary pneumonia runs a quick course; that it is of short duration. The patient does not need much feeding; feed him with a liquid diet, especially at night. If you distend his colon or his stomach, you increase his dyspnea, increase his discomfort, and these act badly on the heart. So do not feed him too much and do not examine him too much. The meddlesome doctor in pneumonia is worse than the meddlesome doctor in obstetrics.

I have been much interested by an article written by Van Santwort, detailing experiments of Romberg, which upset some of my ideas in regard to one phase of this subject. I read a paper before this Society some time ago, taking strong ground against the use of digitalis in the treatment of pneumonia; that if we had high tension, as most of us believed is true in pneumonia, and there was consolidation of the lung, that the administration of digitalis would simply be like whipping a tired horse; that it would narrow the caliber of the arteries, increase the high tension, and do harm. The experiments of the gentleman referred to seemed to conflict with these statements in a very radical way, and seemed to show that instead of having a high tension in pneumonia, we have low tension, a vaso-motor paresis. If that be true, and it has

been confirmed by others, I shall have to get off the ground on which I have heretofore been standing. Since that time another article has appeared by Petresco, claiming marvelous results from heroic doses of digitalis, especially early in the disease. It seems to me that if digitalis is ever indicated in pneumonia, it must be at the start. Then comes the question, are all these cases that we see, especially during an epidemic of influenza that start out like pneumonia, are they really pneumonia? Even without the use of digitalis I have seen many of them apparently aborted in twelve to twenty-four hours. In that class of cases, if we get the same results from large doses of digitalis as were obtained from rest in bed, the application of ice, etc., might not undue importance be attached to the use of digitalis. The treatment of pneumonia is to be directed against the toxemia. First rest in bed, then relief of pain. For a number of years I have been using the ice pack whenever it would be allowed by the patient, or where the circumstances would admit of its application; if pain does not yield to this treatment, together with hypodermatic use of morphine and atropine, it is absolute evidence that there is pleuritic involvement, and in such cases nothing has acted so well in my hands as the actual cautery lightly applied.

The next point is to sustain the heart; we all have that in view. It is often said that in pneumonia you should keep down the temperature. I am not afraid of high temperature in pneumonia. I would pray most devoutly in any one of these cases that the temperature would run from 103° to 104° F.—I believe this is the normal temperature of pneumonia, and I would much rather have it. I fear most those cases where the temperature runs low. What I call the normal temperature of 103° or 104° F. I believe is a most valuable safeguard for a patient with pneumonia. I do not believe he runs much danger from the heart in high temperature. I believe the high temperature tends to destroy the toxins that are generated prepares the patient to better resist them. I would rather see a moderately high temperature (what I call normal) in pneumonia than a low temperature. So I use none of the antipyretics. I do not even use quinine. The only thing I do use that might be called an antipyretic is the ice pack. I like that better than the method recommended by Baruch, of New York, viz: the wet sheet, which is far more troublesome, and I never felt justified in taking a patient and stripping him and wrapping him up in a wet sheet. I have always been satisfied with the results obtained from the ice bag.

How can any one who believes that the true cause of pneumonia is as has been demonstrated by bacteriological investigations and the teachings of pathology, how can they feel satisfied of success in treating pneumonia by means of veratrum viride, aconite, or any of the so-called old remedies? If any thing is to be used in the shape of medicine, it seems to me we can count the different kinds on our fingers. Strychnine first, and this should be administered in heroic doses. I have given it in very large quantities. I start with one twentieth or one thirtieth, and increase it up to one tenth of a grain. The only disadvantage I have ever seen has been occasionally a little nervous excitement, especially after the evening dose. I give it hypodermatically. I believe the more we can spare the stomach, the more we can put in hypodermatically, the better the chances will be for the patient. Strychnine in large doses, I believe, will do more towards bridging the patient over the critical period where we fear heart failure than any other single agent we have. I have also used nitro-glycerine. I have given that frequently and at short intervals. This remedy ought only to be kept up for a short time. When you begin to lower the tension too much, then you may go to the other extreme. The idea is to dilate the superficial capillaries, bleed the patient into his own capillaries, and relieve the internal congestion. If you go beyond a certain point you are defeating the very object you have in view. Nitro-glycerine had better be given separately, rather than in combination with strychnine or any other agent.

There are two other agents that I have used. One is caffeine. Caffeine salicylate or caffeine itself in full doses, especially in those cases where you have the slight, scanty quantity of urine, with great deficiency of the chlorides. Three-grain doses three times a day of caffeine, benzoate, or salicylate, preceded by a dose of calomel, will come nearer producing free diuresis than any thing I have tried.

The other agent is digitalis. I have used in the last two years only one preparation of digitalis, and this I have given in heroic doses. It is the amorphous digitaline (Merck); it is soluble in water. I have given one eighth to two grain doses. It does not produce nausea. It seems to me that this has some very decided advantages over the other preparations of digitalis, and none of their disadvantages, and if I use digitalis at all this is the preparation I give.

Any doctor who has seen pneumonia simply in private practice would have a very different idea of the disease if he were to see a num-

ber of cases, for instance, in the city hospital or any one of the infirmaries. To carry out the point made earlier in my remarks, simple rest and the management I have outlined, will yield much better results than the unnecessary, useless drugging.

LOUISVILLE.

HEMORRHOIDS: CAUSATION AND TREATMENT.

BY O. L. JONES, M. D.

There is no disease known to the medical profession that was so exclusively in the hands of the itinerant, until the past two decades, as the one to which I refer, and to say that they reaped an abundant harvest is but mildly expressing it, and many of the unsuspecting that were treated by the charlatan after a time realized the depletion of their bank accounts and their condition not benefited.

We are indebted to Mathews, Kelsey, and Allingham for their investigation of cause and treatment of diseases of the rectum, and under their teachings we can happily say that the average physician, under proper training, can promise an absolute cure with the proper treatment applied.

For simplicity we will divide hemorrhoids into two classes, viz: Internal and external, and probably, we might say, a mixed variety. Their location will decide the class to which they belong, and I believe the treatment should be the same, regardless of location.

Now, as to the cause there is a diversity of opinion, but I think clinical evidence will bear me out when I say most cases are due to a varicosity of the hemorrhoid plexus primarily, followed by inflammation and infiltration of plasma.

We find this effect on the venous distribution in an overloaded rectum and in pregnancy.

It is true there are cases in which we can not assign a cause, but that does not prove that no cause exists, but to the contrary, for every effect there must be a cause.

The treatment is mainly surgical. In fact, I believe it to be the only curative treatment. We can palliate by applications of cold or heat, ointments of various kinds, which will allay the inflammation in time, but you still have the diseased condition present, and at an inopportune time your patient will return to you in a worse condition than before.

After deciding on an operation, and having gained permission from your patient, the question for you to decide is, What operation shall we do; shall we inject hemorrhoids with carbolic acid? No; my objection to this method is this: (1) It may result in embolism. (2) It may be followed by violent inflammation and sloughing. (3) It may be followed by dangerous hemorrhage. (4) It may be followed by sepsis.

I think there are but two methods that deserve our attention: (1) Clamp and cautery. (2) Ligature and excision.

Of the two, the latter is my preference: (1) Because a cut will heal more readily than a burn. (2) It is less liable to be followed by a stricture. (3) It is less liable to be followed by hemorrhage.

The instruments I use are a Cook's speculum, Mathews' pile-forceps, a bistoury, and a strong silk ligature to throw around pile; and when this method is used properly we need not fear any bad results, but, on the contrary, a cure can be guaranteed.

FORT WORTH, TEX.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, January 13, 1899, the President, Thomas Hunt Stucky, M. D., in the chair.

Detached Retina. Dr. J. M. Ray: This specimen is an eye removed from a man about forty-five years of age, whom I first saw in the late spring or early summer of 1898. He applied to me because of sudden blindness in one eye. On examining the eye I found that he had a detached retina involving the lower and inner portion of the retina. I told him that I did not know of any treatment which would be of any avail. Tension of the eye was normal, and he complained of no pain. I saw nothing more of him for two months, when he returned, stating that his eye had gotten worse. I found that he then had a complete detached retina, the vitreus filled with floating bodies. The man again passed from my observation, and I saw no more of him until in November, 1898, when he came back complaining of pain in the eye. On examination I found him suffering from an attack of hyalitis and cyclitis, very much ciliary injection, and a minus tension in the eye. The eye had begun to soften. The

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

pupil dilated well under a mydriatic, and under hot applications the pain subsided. In a few weeks he had a relapse. This was a little more severe, the pain lasted longer, but under antiphlogistics it gradually subsided in two weeks. Three or four days before Christmas he had another attack, accompanying which there was a great deal of pain. The eyeball was soft and the anterior chamber had become very deep. The iris began to recede into the vitreous. Tension was still minus in that eye.

I advised the man to have the eye removed; it was useless, painful, and, after some parleying with me, he finally consented to the operation. It has been hardened in formol solution, frozen, and then divided in a horizontal direction, and here is the specimen. It is of no especial interest except that it shows very prettily the detached retina which is present, and here seems to be a large rent in the retina. There is no growth present in the eye; I did not expect to find one, but the specimen shows an opening through the retina.

The peculiar interest in the specimen seems to be its bearing on the pathology of detachments of the retina. There have been a great many theories advanced with reference to the causation of detachment of the retina. It is claimed by some that it is due to an extravasation under the retina. It occurs, as a rule, very suddenly, and if there is any exudation under the retina with any amount of serum, it seems to me that it would be rather slow in its formation. The history of detachment of the retina as a rule is that there is a sudden defect in the field of vision. The exudation theory does not explain those cases that occur suddenly. In a traumatic case it might possibly occur from sudden hemorrhage under the retina. In the idiopathic cases the exudation theory does not explain them. Another theory is that it is due to contraction of the vitreous, and Nordensen claimed there was always present a rupture of the retina. Several writers who have examined many such eyes deny that rupture is present. This specimen bears out the Nordensen theory. In the first place there is contraction of the vitreous; fibers extend through the vitreous body and draw the retina away from its attachment to the choroid. Contraction has gone on until it has drawn the iris back from the anterior chamber and the latter is filled with albuminous fluid. Between the retina and choroid there was also a certain amount of albuminous substance. There is a large rent in the retina just at the site of the original detachment at the lower and inner side.

Discussion. Dr. William Cheatham: According to an article I read recently, we may have detachment of the retina with intra-ocular growths where there is decreased tension. The gentleman reported a series of cases of ocular growths which behaved just as Dr. Ray has stated. My observation has been similar to that of Dr. Ray, viz., that in most cases where we have an intra-ocular growth there is an increased tension. In some instances, however, these cases behave just as do intra-cranial growths. As the growth presses upon the eye, there will be pain, then the eye accommodates itself to this increased tension just as the brain does in an intra-cranial tumor. Pain will subside, then the growth extends a little further, pain recurs, and, as the eye accommodates itself again to the increased pressure, the pain again subsides. When the first attack of pain occurs I always suspect an intra-ocular growth. The gentleman who reported the cases to which I have referred stated that the growths sprang from the posterior part of the eye, and the iris receded in the latter stage of the disease just as it did in Dr. Ray's case. He could not explain this. In some of his cases the growth had broken through the posterior part of the eyeball. He closes his article with the statement that in eyes which have been blind for any length of time, especially in eyes with detached retina, with pain, you can feel sure there is an intra-ocular growth. Once, on a visit to Dr. Noyes' hospital, he showed me a detached retina with rupture, and he says that they nearly all rupture. One of the first things I would have suspected in Dr. Ray's case would have been a growth of some kind, and that is why I asked him why he was so sure there was no growth.

Dr. S. G. Dabney: My experience has been similar to that of Drs. Ray and Cheatham concerning intra-ocular growths. I showed a sarcoma of the choroid before a recent meeting of this Society, and read a paper upon that subject some time ago. In the case which I reported at that time the lady has become perfectly well. In her case tension was decreased at first. The glaucomatous attacks came on from time to time; there was also a very deep anterior chamber peripherally. This is not hard to explain; it is due to contraction from the cyclitis pulling back the periphery of the iris. The central portion is seldom contracted. Absence of tension or decreased tension certainly does not exclude the possibility of an intra-ocular growth. As a rule, however, in intra-ocular growths the tension is increased. It would appear to me that in Dr. Ray's case the detachment was due probably to an

old cyclitis that produced fibrillar changes in the vitreous, and detachment resulted from contraction of these fibrillæ.

I was struck with Dr. Knapp's article in Norris & Oliver's *System of Diseases of the Eye*, in which he describes retinal detachment as a symptom, not a disease. It would seem to be a symptom if cyclitis produces a rupture and consequent detachment of the retina. I have had occasion to look up the subject lately, and have read Schöbl's article in the same book. He takes the ground that all of these cases can not be explained upon the same hypothesis; that the trouble in one case may be due to a hemorrhage, where the symptoms come on suddenly; in another case there may be an effusion between the retina and choroid; in a third case it may be due to contraction.

It would be interesting, and, perhaps, throw some light on the present case, had Doctor Ray seen this man previously and had known more of the history of the eye before the attack mentioned.

I have in mind now the only case of detached retina I have seen which I thought would get well. Four weeks ago next Monday a boy fourteen years of age, under size, anemic, bad general health, overworked and ill-fed, came to me, stating that on the Saturday previous he had begun to get blind in one eye. I had examined his eyes several times within the last few years, and knew he was subject to 3 or 4 D. near-sightedness. I looked into the eye and found a well-marked detachment at the outer and upper part of the retina. Realizing that in most cases, if the trouble begins in the upper portion of the retina, it usually sinks by gravity, and the whole is gradually involved, I told the family that the boy would probably lose his eye, yet there was a forlorn hope that it might be saved, and we would put him under treatment. He was also the subject of rheumatism. I put him to bed that evening and gave him salicylate of soda and put a bandage over both eyes. I did not examine the eye again for several days, when I was very much gratified to find that the retina had become reattached. He is still in bed, and it is now four weeks since the treatment was begun. The only medical treatment has been salicylate of soda; but the hygienic treatment and rest in bed, I think, is of the most importance. He has had absolute rest in the recumbent position. I examined the eye again this afternoon, and the retina is still in proper position; there are no symptoms of detachment, and sight in the eye is about as good as it was before the detachment occurred. We know the difficulty in these cases is to prevent the retina from

becoming again detached. I believe it is not very rare for this sequence of things to take place as I have described. That is, under rest in bed, salicylate of soda or pilocarpine, the retina may become perfectly attached, but is liable to fall again when the patient gets up and walks about. I shall keep this boy in bed at least three weeks longer, and hope by that time no further trouble will occur.

The points of interest in the case are, first, the age of the patient; second, the detached retina which promises a cure.

Dr. C. Skinner: Does syphilis play any part in the etiology of detached retina?

Dr. J. M. Ray: I do not know that syphilis is an etiological factor in detachment of the retina. Frequently the starting point, however, is a localized choroidal inflammation, and probably syphilis is the most important factor in the production of choroidal exudates. I can readily see why, in cases where there is an exudation, the retina will become lifted up and become detached.

I never saw this man until he presented with partial blindness. He said that the eye had never given him any trouble, and he had never seen a doctor until he began to have this defect in vision. I first saw him in the spring or early summer. I had just heard a paper read at the Chicago meeting of the Western Ophthalmological Society, by Stillson, in which he reported several cases of detachment of the retina cured by puncturing the sclera with the galvano cautery, and was inclined to try it in this case. There were but few opacities in the vitreus, and it looked like a good case for this method of treatment. I told the man I would watch it awhile, intending later to suggest treatment by cautery; but subsequent events showed that no amount of scleral puncture would have had any influence in reattaching the retina.

Cassaripe in the Treatment of Corneal Ulcers. Dr. Wm. Cheatham: A new medicine has recently been introduced for the treatment of corneal ulcers and other infectious conditions of the eye, viz: Cassaripe. My attention was first called to it by an article, by Risley, in the Philadelphia Medical Journal. I have used it in a case of ulcer of the cornea from exposure; there was also paralysis of the eyelid; the boy had had typhoid fever; he also had enlargement of the parotid gland; the disease itself may have affected the nerve. There was paralysis of the lid which left the eye open, and it was subjected to considerable irrita-

tion from particles of dust, etc. There finally developed an ulcer on the lower part of the cornea. Under atropine and warm water, cassaripe five per cent mixture with vaseline cereate, the ulcer healed nicely.

I had another case, a woman who had a conical cornea with an ulcer; the conicity pointing downward and outward, the lower part of the cornea being extremely thin. I used cassaripe in this case with excellent result.

Cassaripe is obtained from the bitter cassava-plant. "The natives in making cassava bread grate the root, and a milky juice exudes. This is acid, and is supposed to be very poisonous. The juice is concentrated to a semi-solid known as cassaripe, heat destroying its poisonous qualities. Its use by me was suggested while in the tropics, by learning that it was used commonly as a preservative, a solution poured over meat seeming to preserve it indefinitely. Theodore Metcalf Co. imported some for me two or three years ago, as none could be found in this country. In using it I often incorporate atropin or pilocarpin with happy results. In large, sloughing ulcers in old persons it has given more satisfaction to me than any thing I have ever used." (Chandler.)

Discussion. Dr. J. M. Ray: I notice at the last meeting of the American Ophthalmological Society, Dr. Risley, of Philadelphia, read a paper in which he recommended cassaripe ointment in the treatment of corneal ulcers. I asked some of the local druggists if they could get me a supply, but failed. I dropped the matter for the time being, but later secured some of the ointment, and have used it in two cases of ulceration of the cornea. It has only been a short time since its use was commenced, and I can not say much about its effects.

Dr. F. C. Simpson read a written report of a case, as follows:

Mrs. Artie A., aged eighteen years. Married in December, 1897; became pregnant in March, 1898. Family history fair; mother dying of consumption at the age of thirty-two years. Father died of pneumonia at the age of thirty-five. Has one brother, aged twelve, whose health is good. I saw her on July 9th. She complained of pain over abdomen; had been suffering since July 4th. She thought it was an attack of colic, as pain came on at night, after spending the day out on a picnic excursion; she having eaten a very great quantity of different things on that day. Pain had gradually increased since

the 4th. I was sent for on July the 6th; was out of the city. Dr. Hays saw her on the 6th and 7th. He gave her opiates, being under the impression it was an attack of colic. I did not see her until July 9th. I was of the opinion she was suffering from uterine pains, as the uterus was contracted and she was having intermittent pains. I examined over abdomen; found her tender. Thinking it due to the continuous contraction that had been going on for four previous days, I allowed it to pass out of my mind as its being caused by any other condition than an effort of uterus to empty its contents. On July 10th, Saturday, I was called at 5 A. M., by the husband, to come at once; that his wife had had a miscarriage. I arrived half an hour later and found the contents of the uterus had been expelled in toto. I examined placenta, and, so far as I know, it was all passed. I examined over abdomen to see if uterus had contracted properly. To my surprise I found a very tender and swollen abdomen. I fail to understand what could cause such condition. Later in the day I diagnosed peritonitis, as the abdomen became very painful and board-like. I gave a very unfavorable prognosis. I called in Drs. Bullock and Vance, July 11th, Sunday. They agreed she had peritonitis, but could not understand the cause for it, giving as their opinion that it was either due to ruptured tube or perforation of uterus, possibly from criminal abortion. It was possibly suggested she might have appendicitis, but that was very remote. Dr. Vance declined to operate, as she seemed to be in shock, pulse being very weak and fast. She had only slight temperature during the three days I was in attendance, not above 101°. She was moved to City Hospital on July 11th, Sunday, Dr. Frank in charge. He was in the dark about the cause. She went on from bad to worse, and died on July 12th. Autopsy was held on July 13th, and found ruptured appendix with large number of enteroliths. The uterus was in good condition; no evidence of any criminal effort, every thing in good condition; found few clots in uterus which were not decomposing. In this case it was certainly puzzling to make a diagnosis, and the complications were of the kind to completely mask the more important and prominent symptoms of appendicitis. I believe if I had thought for a moment that appendicitis existed or was possible the first day I saw the case, I might have found some of the characteristic symptoms. The error in diagnosis is one that any of the Fellows might have made, as the conditions only pointed to an effort to get rid of what was in the uterus.

Discussion. Dr. Turner Anderson: I agree with the doctor that this was one of those complications which may occur during the progress of gestation where any of us might fail to make a correct diagnosis.

Dr. J. L. Johnson (present by invitation): I feel that the only mistake was that an exploratory incision was not made for diagnostic purposes. I think it is always justifiable where we are at a loss to make a diagnosis, especially in such a case as this. Any of us under such circumstances would be likely to make an error in diagnosis. An exploratory incision might have been the means of saving the patient's life.

In lieu of the essay, Dr. J. B. Marvin made some remarks on "The Pathology and Treatment of Pneumonia." [See p. 88.]

Discussion. Dr. J. E. Hays: What do you think of the value of ammonia in the treatment of the pneumonias?

Dr. J. B. Marvin: I accord it only a secondary place. The carbonate, muriate, and aromatic spirits have all been recommended with the idea not only of a cardiac stimulant but as great resolvers of fibrin. I question very much whether they dissolve any fibrin. I think they will stimulate the heart, but the dose required is so great that you run greater risk of irritating the stomach than you do of stimulating the heart, and if we have a better cardiac stimulant, it should be used. You have all seen cases of pneumonia where crises have occurred, still the lung was apparently solid. That does not measure the severity of the attack nor does it measure the duration of the disease; so I seldom use ammonia; if I do, it is in the simplest form possible.

Dr. H. A. Cottell: Dr. Marvin has given us the freshest and best views with reference to pneumonia. It has not been my observation, however, that pneumonia in this recent epidemic of grip has been any thing like as fatal as it was three or four years ago. At that time, to encounter a case of pneumonia was practically synonymous with signing a death certificate. In this recent epidemic of grip I have not seen more than two or three cases of pneumonia, and these were very manageable. I was not aware that there had been many fatal cases of acute croupous pneumonia. Of course there have been many cases of catarrhal affections of the lung, which, in old or feeble patients, have proved fatal, and this is perhaps the cause of the fatal statistical showing.

I was impressed with the pathological presentation of the subject by Dr. Marvin, that we can have pneumonia from four or five specific causes. Why not? There is a traumatic pneumonia and a pneumonia from breathing ammonia gas, chlorine, etc. I suppose the streptococcus and possibly the staphylococcus, if they get into the air-cells of the lung, may bring about symptoms which we would call pneumonia; symptoms similar to those produced by the pneumococcus. We might also have a similar condition from the diphtheria bacillus. But the question arises in my mind, would the clinical history be the same in each case; would we have the crepitant rale in the early stages; would there be brickdust sputum, consolidation, chest, voice, bronchial breathing, etc.? I think the conclusion is a legitimate one that we may have pneumonia from half a dozen specific causes, but it would be very interesting to trace out the clinical history in each case. I do not know that this has been done, but it might enable us to make a differential diagnosis perhaps without appealing to the bacteriologist or microscopist.

As to treatment, I agree with Dr. Marvin in the "let alone" side of it. I think patients are drugged altogether too much in pneumonia. I am not in the habit of using any of the coal-tar derivatives, quinine, etc., after I have made the diagnosis. I let the fever alone. I watch the patient's heart and respirations. I am inclined to Dr. Marvin's view, that the circulatory phenomena are high tension rather than low tension. I do not often use digitalis in pneumonia. There may be conditions which call for it. The physician's finger should determine the question as to whether digitalis is indicated in every case. I do not know that it is worth while to spin any theories in regard to high or low tension. When you have a feeble, rapid pulse, you may give digitalis; when you have a slow pulse, no matter how feeble it is, do not give digitalis; when you have an intermittent pulse, if you are giving digitalis, stop at once. It has been my rule in the treatment of pneumonia to depend very largely upon full doses of carbonate of ammonia and strychnine.

Dr. J. G. Cecil: Following the line of thought suggested by the remarks of Dr. Marvin, it seems to me that we shall either have to change our ideas of the pathology of pneumonia or else the nomenclature. The question is whether we are calling some things pneumonia which are not, or whether we are misnaming things that are pneumonia. I believe that croupous pneumonia is a specific disease, due

principally to the effect of the pneumococcus of Frankel, together with such additional causes as exposure to cold, etc. We see many cases of anomalous pneumonia, and this is the explanation of cases that are apparently aborted. I have always doubted that true pneumonia could be aborted.

The suggestions made by Dr. Marvin in regard to this and other diseases in connection with their causation are of extreme interest to me. We all see cases of typhoid fever start out as pneumonia. The question is, do we really have a pathological condition of the lung which would and should be regarded as pneumonia, or is it something else? Can such a condition result from the bacillus of Eberth? I have not been disposed to question the nature of croupous pneumonia as long as I get the old-fashioned classical symptoms of pneumonia. Recently, in the epidemic of grip which is just now subsiding, I saw one case which occurred in a young woman twenty-two years of age. She had the ordinary symptoms of grip; after partial recovery she exposed herself by going out in the evening, and a short time afterwards was taken to bed with the ordinary classical clinical signs of pneumonia. I regarded it then as pneumonia, and believe now that it was. It ran a course which was typical of pneumonia, every symptom present needed in making a diagnosis—crepitant rale, dullness on percussion, bronchial breathing, brickdust sputum, pleuritic pain, etc. The ice bag applied to the seat of pain gave prompt relief, and I can confirm what Dr. Marvin has said in regard to the value of this method in all cases in which I have used it. I use it now to the exclusion of all other topical applications, and it usually gives prompt relief from pain. She was also given the old-fashioned liquid Dover's powder, which had a very pleasant effect; under its influence she was able to sleep; the fever ran along 103° to 104° F. for several days, with a good pulse, ranging from 100 to 120; she made a prompt recovery with no other medication except stimulants and a heart tonic. I always give, whenever I make a diagnosis of pneumonia, full doses of strychnine from the beginning with whisky. The disease in this case ran a course of four days under these conditions, then terminated without the ordinary signs of crisis. There was not the diarrhea, there was not the critical sweating, but simply a gradual decline of the disease, with nothing to account for it except the ice bag and other treatment indicated. She made a good recovery with some dullness remaining in the affected lobe. The question arises in a case like this, did we have a

true pneumonia or not? If we are to determine by the symptoms present, it was certainly a case of true croupous pneumonia. In such cases I am simply disposed to admit that grip is a predisposing cause, and the pneumococcus is really the actual cause.

In regard to the other diseases, what we may say of one is practically true of the others, as erysipelas, diphtheria, etc. I am not disposed to agree that, when we find rapid respiration, dyspnea, rapid pulse, and cough, without the characteristic brickdust sputum, without the other classical signs of pneumonia, that we are justified in calling the case one of pneumonia. We will have to get another name for the disease or else change the name of pneumonia. It is an interesting study, and I have no doubt it is a field in which we will see wonderful development in the near future.

There is a great deal that is suggestive in what Dr. Marvin has said, because of the many things which start out as one thing and terminate as another. Typhoid fever starts out in many different ways. We have all seen typhoid fever start out exactly like meningitis and obscure the diagnosis for several days or a week, and then finally drop into the old-fashioned typhoid fever and pass through an otherwise typical course. In a case of that kind are we justified in saying that it began as a meningitis? What effect the typhoid fever poison has, or whether it is the effect of the typhoid fever poison on the meninges, is quite another question; but, if it should not run the usual course of meningitis, are we justified in diagnosing this disease? Is it not simply an exaggerated manifestation of the condition of the brain or of the meninges produced by the typhoid fever poison which is circulating through the blood? The same thought applies to cases of pneumonia which exhibit evidences of typhoid fever.

I can not but believe that pneumonia is a disease which it is impossible to abort. I do not believe it can be aborted any more than can measles, smallpox, or any other specific disease which has a history and runs a course which is recognized as the course of that particular disease.

In regard to the treatment, I am quite in accord with the suggestions made by Dr. Marvin. I believe the less we treat these cases the better they do. Certainly, so far as treatment is concerned, we have no specific whatever in the treatment of pneumonia. My practice has been to sustain the heart, to maintain the strength of the patient, proper feeding, and wait. I do not fear an ordinary range of fever in

pneumonia. I do not think it is a matter of as great importance as it is in typhoid fever. A course of fever with a temperature of 105° F. will not kill a man in four or five days. Just now we have a friend who is in a great deal of trouble, and Dr. Marvin's talk has suggested to me that possibly some light may be thrown upon the case. This child had what we thought was scarlet fever, and it is possible that Dr. Marvin will admit scarlet fever into his new pneumonia class. The little girl is three years old, and had exposure from two cases of scarlet fever in the family. She suffered a high fever, while the scarlatinal rash covered the body. She had a warm bath to control the nervous symptoms and also to induce freer expression of the rash. The next morning she had not a sign of rash anywhere upon her body. She did not have fever. She was up about the room at play. In two or three days she developed high fever again. Her temperature since then, now ten days, has been ranging from normal to 105° or 106° F. in the axilla, which means 107° F. in the rectum. The fever varies in various ways, it runs up and down, regardless of antiphlogistic measures, regardless of the time of day, or any thing else. She has to-day some symptoms of broncho-pneumonia, rapid pulse, rapid respiration, 60 to 65, without cyanosis, with a cough which is not characteristic, yet she presents some of the conditions usually found in broncho-pneumonia. Probably in ten hours her temperature will drop to 99° or 100° F., the cough will cease, and respiration become normal. What condition can be existing in that child now? Is it possible that she has some one of the varieties of pneumonia mentioned, and due to scarlatinal poison, that does not show any symptom which is constant, that does not exhibit the usual characteristics of an ordinary attack?

Dr. F. C. Wilson: There are only one or two points that I care to touch upon. I believe that many cases of pneumonia have present the characteristic organism, and many others that are classed as pneumonia have not. I further believe that those cases in which the organism is found are the ones that are generally looked upon as communicable or contagious. You see many instances where the disease simply runs through whole families, contracted one from another, and in such cases no care has been taken to destroy the sputum of the sick ones. Much is yet to be learned about the pathology, classification, etc., of pneumonia. Those cases met with which run a typical course, commencing with a chill followed by high fever, some cough, little or no pain, where the sputum soon becomes red, brickdust in character, respiration

rapid, face suffused, temperature running up to 103-4-5° F.—in these cases a physical examination will disclose slight dullness on percussion, with the presence of a decided, unmistakable crepitant rale—it seems to me, are the ones that we can safely say are pneumonia. We do not get that group of symptoms in other conditions.

As to treatment and the effect of treatment: The question of the duration of pneumonia has been raised. I may have some radical views upon that subject, because I have always believed that in some instances pneumonia could be aborted. I have believed that for many years, and am sincere when I say I have seen cases aborted that no one could tell from other cases that have gone through the typical course of pneumonia, and the various stages have been cut short, whether as a result of the treatment or simply the result of nature's efforts I will not undertake to say. I have seen cases that commenced with a chill, that have been followed by high fever, that have given slight dullness on percussion over a certain area of the lung, that have shown decided rusty sputum, where the symptoms have all disappeared in twenty-four to forty-eight hours. So far as I could judge, so far as anyone could say, those cases were just as much pneumonia as other cases which have gone on, and, at the end of forty-eight hours, developed consolidation, bronchophony, and all the physical signs of pneumonia. Of course, there are several stages of pneumonia, the stage of congestion, state of consolidation, state of resolution, etc., that are usually recognized. The first stage is the one in which we get the crepitant rale. There is not yet consolidation, there is not yet exudation more than sufficient to simply agglutinate the surfaces of the air-cells, there is not yet exudation enough to become solid in those spaces, and it seems to me if any efforts at abortion are to be made they must be made at that time. If we pass that stage then no efforts can ever accomplish abortion. Now the question is, what efforts can be made in that direction? I have always relied upon a preparation of ergot to accomplish something in that line. We know it is a fact about the action of ergot that it contracts the blood-vessels, the arterioles; that it cuts off the supply of blood to certain portions of the system, and there is this peculiarity in the action of ergot, that its first effect is upon those portions of the system where it is needed; it does not contract other arterioles of the system, but only that portion of the system supplied with dilated arterioles. If ergot has its effect in that direction, it seems to me that something may be accomplished by its administration. I believe that in the

use of it I have accomplished something. I can look back over my own experience at scores of cases which have gone through that course, which have been, as far as I could judge, typical cases in the first stage of pneumonia, which have been cut short at the end of forty-eight hours. I believe further that even if success is not met with, even if you do not see this result accomplished, you have lost no ground, you have simply given the patient a chance to abort the disease, and if you do not succeed at the end of forty-eight hours you can still go on with the usual course of treatment. I am satisfied that in many instances I have at least limited the extension of the exudation and caused the case to run a more favorable course.

Dr. J. B. Marvin: I have seen very few deaths from pneumonia during the present outbreak, but the death reports of the city show a very large number. I do not classify those cases having fever, pain, rapid respiration, rapid pulse, that are so quickly cut short, as pneumonia. I believe it is a mistaken diagnosis to call such cases pneumonia. I think my friend, Dr. Wilson, has been a little "cross-eyed" for some time on aborting typhoid fever as well as pneumonia, and I hope he will see the error of his ways and reform. I believe it is just such cases as are prevalent now, which I do not consider genuine pneumonia, that are spoken of as being aborted.

I did not attempt to take every thing into consideration in my former remarks, but the investigations of Klein and a number of others have proved that in genuine cases of pneumonia, with the pathological changes that we find in croupous pneumonia, there has been frequent absence of the pneumococcus of Frankel, and they have found other bacilli, and out of these investigations grew the remarks that I made.

LOUIS FRANK M. D., *Secretary.*

HYPODERMIC INJECTIONS OF SALINE SOLUTION IN ECLAMPSIA.—Poucet and Vinay (*Scm. Méd.*, June 1, 1898) report the following case: A woman in the sixth month of pregnancy was attacked with eclampsia, and her general condition was extremely serious, with complete coma, suppression of urine, high temperature, etc. Abortion was induced, the child being dead when born; $5\frac{1}{4}$ pints of normal saline solution were then injected hypodermically. Recovery was rapid and complete.—*British Medical Journal.*

Reviews and Bibliography.

A Text-Book of Obstetrics. By BARTON COOK HIRST, M. D., Professor of Obstetrics in the University of Pennsylvania. With 653 illustrations. 846 pp. Price, cloth, \$4.00; sheep, \$5.00. Philadelphia: W. B. Saunders. 1898.

The medical profession of the United States and not a few physicians, perhaps, in Europe have been looking forward with interest to the appearance of the promised text-book on obstetrics by Prof. Hirst. And it is safe to say that when they have examined the book they will not be disappointed.

The latest work in obstetrics ought to be the best. Progress is constantly being made in the confirmation of experience, knowledge is becoming more certain, and in addition to that the art of illustration and of book-making is constantly progressing. This work shows art in bookmaking, and science and practical knowledge in obstetrics at its best.

The industry of the author is exhibited in the most favorable light. The whole field of reputable literature has been searched for the latest and the fullest contribution to obstetric art and science. Wise discretion has been shown in the selection of such doctrines and practices as have met with the most authoritative approval, with possibly a few exceptions.

The illustrations are so abundant, so apt, and so well arranged that they almost of themselves form a teaching system of obstetrics. In practical obstetrics there are not to-day many moot points. In the treatment of eclampsia there is, perhaps, more difference of view than on any other matter in the whole of obstetrics.

The author gives statistics as reported by a number of authorities, showing a range of from two to sixty-six per cent of deaths in institutions equally reputable.

It is gratuitously rude to intimate falsehood against any of the reporters, the most favorable reports being made by such men as Veit and Winckel. But there is something untold that makes the difference in results, since the same course of treatment in different hands gives widely different results. The author favors deep anesthetization with vigorous purging. Yet it is well known that elimination of substances left in the blood by defective action of the kidneys can not be made to take place by the bowel.

It may be that in some sections the doctor is sought when eclampsia is feared, and that in this way the unpromising cases are guarded by proper prophylaxis and do not suffer attack, thus leaving the mildly affected individuals to suffer. Having spoken of the practical aspects of the book in the high terms it is believed to deserve, a word may be said of the theoretical or philosophical part, one in which the reviewer takes especial interest

from having long labored in that field. And he makes bold to say that in the theory of rotation and presentation the work is the weakest since the day Hippocrates got his diploma.

For rotation, he says, the cause is that the head, driven through the funnel-shaped parturient canal, its most dependent portion the tip of the occiput, first strikes the resistance of the upper portion of the pelvic floor, which is represented by a curved line or plane running inward, downward, and forward. This explanation does not touch the cases of rotation in occipito-posterior positions, nor of anterior rotations of the head in trunk or shoulder presentations. Nor does it give a definite analysis of the applications of force in any presentations. In short, it fails totally of being an explanation. Rotation is in every instance a matter of leverage on the part of the fetus and of unequal resistance of different parts of the parturient canal.

The author's explanation of the frequency of head presentations must make Hippocrates smile in the land of spirits. This is found, he says, in a voluntary assumption of that position of the fetus, because it affords it the greatest degree of comfort and the best opportunity for growth and development. Age has hitherto been claimed as the period of wisdom, but this would give it to the fetus in utero. Of course it tries all positions, first, to find out which is the most comfortable, and reasonably it should keep on trying, for otherwise it might miss new positions of comfort developed with the successive stages of growth. The "best opportunity for growth and development" it could know only by experience or prescience. Either, then, the little thing is a prophet or else transmigration is true.

Possibly with the new phonendoscope we shall be able to talk with the little fellow and learn something more of the motives for his voluntary movements. But why do things by halves? Why not go a little farther and help out the little ones in their nursery traditions and teach that the doctors bring the babies and that they find them already strung up by the heels in the tree tops. Pity that a work surpassingly excellent as this is should not exhibit a clearer and broader conception of physical principles.

D. T. S.

The Sexual Instinct, its Use and Dangers as Affecting Heredity and Morals. By JAMES FOSTER SCOTT, B. A. (Yale University), M. D., C. M. (Edinburgh University), late Obstetrician to Columbia Hospital for Women, etc. 436 pp. Price, \$2.00. New York: E. B. Treat & Co. 1899.

"Of making many books there is no end," said Solomon, doubtless as a prophet speaking of the present day. But what we should have is some one to say that of making such books as this there should be no beginning.

That a book bearing such a title as this, and pursuing its professed aims, ought to be written by the most earnest and capable man that medicine knows, and read and pondered by every man and woman capable of exercising the sexual functions, does not need argument. But the author

of this work has not made a happy stroke. His style is tedious and prolix. Proposing to write for the laity, he lugs in a great deal of useless and irrelevant scientific matter and not a little deserving a more severe characterization.

The part of the treatise that, whether coming from a brilliant or a dull man, calls for the most serious attention is that relating to abortion. There is no question of the enormous increase of this practice, and there seems to be a most rapidly growing aversion to child-bearing among the more cultivated classes of women.

The unfortunate single woman who becomes pregnant is condemned to a fate worse than "suttee" that missionaries have sought to make so much of in India. But what is worse is that it is coming to be regarded by the public as almost a disreputable thing for even a married woman to show herself in public while pregnant.

There must come a change in public sentiment, or the better element of humanity will perish, and only the lower and duller be left to perpetuate the race. A book like this, if it should happen to be read between sermons, would work sad havoc in the congregation of some of those missionaries whose beneficent teachings our pious statesmen and editors are preparing to shoot out of cannon into the midst of the benighted Philippines and other heathen. It is to be feared that they would at once call for a collection to exchange missionaries.

It is to be hoped the press, secular, religious, and medical, as well as the pulpit, will take up this subject and check this terrible and rapidly growing evil.

D. T. S.

A Handbook of Hygiene and Sanitary Science. By GEORGE WILSON, M. A., M. D., LL. D. (Edin.), F. R. S. (Edin.), D. P. H. (Camb.), Fellow of the Sanitary Institute of Great Britain, etc. Eighth edition. London: J. & A. Churchill; Philadelphia: P. Blakiston's Son & Co. 1898.

This book has long since gained great popularity in Great Britain, as shown by the fact that an eighth edition has been rendered necessary. Large portions have been rewritten and others amended and carefully revised, this having been made necessary by the rapidly increasing interest in sanitary science. The chapters on the analysis of air and water and their impurities have been brought up to date, and that on meteorology has been enlarged.

Extended attention has been given to drainage and the disposal of house refuse and sewage, and a chapter that ought to have been worth thousands of lives, if read by the ward politicians too often put in charge of the camp in our late war, relates to the part played by filth-polluted soil as a breeding-ground for pathogenic organisms.

But bring a crown of oak leaves! The author has the courage to say, "I have made bold to question the inference that statistical results have in any measure established the success of Pasteur's antirabic vaccination as

a remedy for hydrophobia, or of serum antitoxins as cure for diphtheria, tetanus, and other allied diseases." He proves conclusively that Koch's tuberculin not only does not arrest consumption, but that many of the vials actually contain tubercle bacilli as well as other contaminating microbes.

Perhaps the eastern editor who sells his signed editorials will find here that somebody else holds these views besides "obscure interior editors." Much space is devoted to the efforts of the anti-vaccinationists who have lately stirred up a most unreasoning opposition to vaccination.

Altogether, the book is a most satisfactory treatise on a subject outgrowing all others relating to medicine.

D. T. S.

On the Origin and Progress of Renal Surgery. With Special Reference to Stone in the Kidney and to the Surgical Treatment of Calculous Anuria. Being the Hunterian Lectures for 1898, together with a Critical Examination of Subparietal Injuries of the Ureter. By HENRY MORRIS, M. A., M. B. (Lond.), F. R. C. S., Senior Surgeon to the Middlesex Hospital; Examiner in Surgery in the University of London, etc. 288 pp. Price, \$2.00. Philadelphia: P. Blakiston's Son & Co. 1898.

Coming from so eminent a source as the author, a work of this character must be most welcome to any one aspiring to be a thorough surgeon. It is quite exhaustive of the subject, and written and illustrated in the most pleasing manner. The book begins with a concise history of the development of renal surgery, after which follows a lucid description of every form of wound or disease to which the kidneys and ureters are subject requiring surgical treatment.

A brief abstract of two hundred and sixty-seven operations performed by the author on the kidney is arranged in tabular form. A number of cases are also reported in which operations have been done for calculous anuria, a subject about which the author thinks too little is known.

D. T. S.

A Text-Book of Materia Medica, Therapeutics, and Pharmacology. By GEORGE FRANK BUTLER, Ph. G., M. D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Medical Department of the University of Illinois, etc. Second edition. Revised. 860 pp. Price, cloth, \$4.00 net; sheep or half morocco, \$5.00 net.

Unless an author were limited to his own personal experience, there can not be expected a great difference among works on materia medica, except in the style of writing and presenting the subject. The major portion of all such works are compilations. In such parts of this work as are so made up we must simply give the qualification that comes from saying that it is in line with current work.

It is almost as hard to surrender medical dogma and custom as it is religious, and leaving one fetich, it is much easier to swing into another than to take one's stand in the open forum of reason.

Men who had fought homeopathy with the greatest bitterness will jump at some new fad and outdo the most extreme of them. This is so in

great degree with organotherapy and serum treatment. It is here that in its claims this book seems to be scarcely ahead of some commercial medical journals. In its arrangement and style it is excellent, and the letter-press could not be other than well done, coming from the house of W. B. Saunders.

D. T. S.

Accident and Injury: Their Relations to Diseases of the Nervous System. By PIERCE BAILEY, A. M., M. D., Attending Physician to the Department of Correction and to the Alms House and Incurable Hospitals, etc. 430 pp. New York: D. Appleton & Co. 1898.

If there is a field where a new book has been needed, it is exactly that occupied by this work. The medical mind seems wholly unsettled as to the nature of the nervous diseases that can be brought on by injuries unaccompanied by gross lesion.

Probably one trouble has been the standpoint of the different classes of physicians engaged in the discussions. Railroad surgeons, carrying out the rule of human nature, have hardly been able to see any thing but fancy or malingering in these cases, and their opponents, driven almost to resentment by this seeming partisanship, have probably veered to the opposite extreme.

Fortunately in this work it is not opinions that are given but authentic cases, and that with evidently the most perfect freedom from bias. We most heartily commend the work to every physician who is likely to meet with cases of the kind, or likely to be called on to testify in them, and this leaves out few indeed.

D. T. S.

Thirteenth Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Two volumes. 1110 pp. William Stanley Ray, State Printer of Pennsylvania. 1898.

This is a more than usually interesting report from the able board of health of Pennsylvania, a board that would do honor to any country whatever. It gives every thing that could easily be conceived of as relating in any important way to the public health, with an interesting report on vital statistics.

Not the least attractive part is that relating to reservoirs and their dams. Descriptions are given of nearly all the important dams in the world with illustrations and in many cases their history.

D. T. S.

Transactions of the American Orthopedic Association. Twelfth Session. Held at Boston, Mass., May 17, 18, and 19, 1898. Volume XI. 467 pp. Philadelphia: Published by the Association. 1898.

The transactions of the Society at the last meeting will sustain and even advance the high esteem in which it is held in every civilized country. Orthopedics is the one branch in surgery in which America is distinctly in the lead. The authority of American orthopedists is everywhere deferred to, and in the list of the members of this association are the workers and leaders in this department.

D. T. S.

THE AMERICAN PRACTITIONER AND NEWS.

"NEC TENUI PENNĀ."

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H. A. COTTELL, M. D., Editor.

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JOHN P. MORTON & COMPANY, Louisville, Ky.

CHRISTIAN SCIENCE.

The death in Omaha on the 27th of December, 1898, of a woman who was a Christian scientist, and who, though the subject of an extensive burn caused by an explosion of boiling turpentine, was allowed to suffer for three days without medical ministration, gives the case of faith versus science a new hearing at bar of public opinion.

The absurdity of such metaphysics as denies the existence of matter and the laws which condition it, holding that all diseases and injuries "are figments of the imagination which will disappear under the power of the mind," has proved insufficient to dissipate the charm wherewith a considerable portion of the public mind is enthralled, and Christian Science has not only been steadily growing in force and influence during the last decade as a healing fad, but has actually become a new religion with societies, church edifices, pulpits, and order of worship which rival the ancient cults of the world.

To demonstrate the utter absurdity of its major premise (which a child might do) and to show that the honest advocates of such a doctrine are insane (which it does not take an alienist to prove) is all foreign to the purpose. The leaven is quick, and is rapidly leavening a large lump in modern society, and nothing short of such fanatical cruelty as the Omaha case exhibits and its suppression by the strong arm of the law can bring these deluded psychopaths to their senses, if even such measures will avail.

The answer of science to these dreamers is full and conclusive—it is: "Show your faith by your works."

Dr. Charles A. L. Reed, of Cincinnati, adopts this method in dealing with Mary Baker G. Eddy, who, in an article published in the New York Sun, "with characteristic bravado" asserts the tenets of Christian Science, claims miraculous results in healing, and "challenges the world to prove a negative."

Dr. Reed says:

She should remember that even people who are not the victims of vagaries such as hers, and whose everyday utterances do not toy so confusingly with the eternal verities as do hers—even such people are expected to bear the burden of proof when they seek to tax credulity. I therefore demand the proof of this high priestess, and that the issue may be clearly drawn I shall take up a few of her declarations *seriatim*:

Mrs. Eddy says: "I healed consumption in its last stages . . . the lungs being mostly consumed."

I denounce this declaration as false, and challenge its substantiation by competent and disinterested testimony.

Mrs. Eddy says: "I healed carious bones that could be dented with the finger."

I denounce this declaration as false, and challenge its substantiation by competent and disinterested testimony.

Mrs. Eddy says: "I have healed at one visit a cancer that had so eaten the flesh of the neck as to expose the jugular vein so that it stood out like a cord."

I denounce this declaration as false, and challenge its substantiation by competent and disinterested testimony.

When Mrs. Eddy speaks of "malignant tubercular diphtheria" as among her cures, she, by her own phraseology, proclaims her utter ignorance of one of the most dangerous of diseases, now nearly bereft of its horrors through the beneficence of modern medical science—a disease chiefly of defenseless childhood that she and her fanatical followers would sacrifice upon the altar of their tragic egoism.

But if Mrs. Eddy has done all of these wonders, she can do them again. If she is devoted to humanity in the altruistic fashion that she proclaims, she will not hesitate to demonstrate her alleged "science" under circumstances that will give it the widest possible influence. To this end, if she will come to Cincinnati I will place at her disposal cases of "consumption," cases of "cancer," and cases of "carious bones." She shall have them under observation for such time as she shall determine, and she shall dictate all details of their management. They shall, however, be under the daily observation of a competent and disinterested person of my choice, but who shall have no voice in their management and who shall visit them

only in her presence. If she, by her Christian Science, shall cure any one of them I shall proclaim her omnipotence from the housetops, and if she shall cure all or even half of them I shall cheerfully crawl on my hands and knees that I may but touch the hem of her—walking dress. If it will be more to the convenience of Mrs. Eddy and she is not disposed to honor us with a visit, I shall take pleasure in endeavoring, through my friends, to make a similar arrangement for her at Bellevue or some other New York hospital. If Mrs. Eddy will accept this challenge and cure one or more of these cases she will thereby demonstrate that she may be something more than either a conscienceless speculator on human credulity or an unfortunate victim of egoistic alienation.

Notes and Queries.

DROPFOOT FOLLOWING ALCOHOLIC PARALYSIS.—Fernand Gaucher draws attention (*Thèse de Paris*, 1898) to the great importance of preventing permanent deformity in cases of alcoholic paralysis. The writer points out that in the large majority of cases permanent dropfoot and other deformities are due to the want of sufficient care on the part of the medical attendant. In all cases of alcoholic paralysis the antero-external group of muscles of the leg are early affected, allowing of dropfoot with internal rotation; consequently, if the patient is lying in bed, pressure of the bed coverings tends to aggravate this pernicious position. It is important, therefore, to correct this deformity by means of suitable apparatus. This, on the other hand, requires considerable caution, as the low trophic condition of the tissues is liable to result in pressure lesions, should any of the different forms of rigid apparatus be employed. The writer therefore suggests using a simple wooden stand, thickly padded so as to maintain the foot at right angles to the leg. The next point is to obviate the pressure on the limbs by using a cradle. During the earlier part of the disease this should suffice, but so soon as the patient is able to bear it, passive movements and massage should be regularly employed, with a view to keeping the mobility of the joints in a healthy condition, and as quickly as possible to promote the nutrition of the wasted muscles. From an early period in the case the exhibition of galvanic currents is necessary. To this may be added the faradic so soon as the patient can stand it. In those cases where dropfoot becomes permanent, there is generally chronic myositis, and it is to prevent this condition that our best efforts should be employed. Sulphur baths, hot-air baths, and other methods have often been of extremely beneficial influence in these cases.—*British Medical Journal*.

THE LANCET'S CRITICAL AND ANALYTICAL INQUIRY INTO QUACKS AND ABORTION: THE METHODS OF QUACKS.—The London Lancet has done good work in exposing the character of certain advertisements too

common in the newspapers and from which the religious papers are not always free, in which cures are guaranteed, on receipt of payment, for "obstructions," "irregularities," and "suppressions," these advertisements being designed to attract women in trouble. It is clearly brought out that the amenorrhea for which remedies are sought generally means pregnancy. Of 183 patients who had amenorrhea, and who presented themselves at the out-patient departments of the large London hospitals, 156 were pregnant, and twelve were young girls at puberty in whom the condition of pregnancy was out of the question, so that of the 171 who might have been pregnant, 156, or 96.5 per cent, were so. Of the remaining fifteen cases, one patient, age twenty-seven years, single, had primary amenorrhea; seven patients (four married and three single) had definite anemia; one patient, single, had had pelvic peritonitis two years before and had seen nothing since; one patient, married, had approaching menopause; one patient, married, had fits, and had seen nothing for seven years, and one patient, married, had seen nothing since before marriage, some years ago. This leaves three patients, two who were married and one who was single, in whom there was no definite cause for the amenorrhea. The Lancet writer, after stating that in none of these cases would the administration of emmenagogues have done any good, concludes: (1) Amenorrhea or irregularity of the periods is common about puberty and at approaching menopause; (2) in otherwise healthy married or single women amenorrhea in the great majority of cases is undoubtedly due to pregnancy; (3) where this is not the case, with very few exceptions (three out of the 183 cases), the condition of the patient or the circumstances under which the periods fail to appear are such as to render unlikely the possibility of pregnancy being the cause. He further reasons that "seeing that the majority of instances in which healthy married women miss a period are cases of commencing pregnancy, it is obvious that such a condition can not be and is not, as a rule, productive of the ills ascribed to it by the venders of quack nostrums; while equally, as a rule, to attempt to bring on menstruation in such cases is to attempt a criminal abortion."

The occurrence of amenorrhea in cases of anemia or other debilitating diseases, such as phthisis, is beneficial to the patient by avoiding any loss of blood, and is a provision of nature to assist in arresting the progress of the diseases causing the condition.

The Lancet's exposure of the knavery of the advertisements is timely. There is a legion of shameless shysters — of whom we have some on this side of the water — who subsidize the newspapers and parade with unblushing impudence their "never-failing" specifics, and who have doubtless too long been let severely alone by the medical profession and by the police. The analysis made by the Lancet's chemist of many of these nostrums shows them to be composed of such simple and well-known ingredients as sulphate of iron, aloes, colocynth, and Glauber salt; in some, traces of rue, apiol, and savin were detected. One of the most popular of these

nostrums contained aloes, iron, and borax. It has been asked whether any real harm has ever been received by taking these "female pills," and we are referred to the evidence given at a certain coroner's inquest lately, to the effect that a woman had been poisoned by large doses of aloes in some emmenagogue pills swallowed to produce abortion. Ordinarily, however, the patent-medicine vender takes care that his medicine shall be innocuous in any dose. He well knows that his nostrums will sell in the ratio of the way they are advertised and the lies that are flaunted about them before the public, not in the ratio of their merit. Quacks often evince in the wording of their advertisements a genius worthy of a better cause, as one can readily see who reads the numerous nostrum advertisements which the *Lancet* has published, giving the proprietors a notoriety free of charge. The credulous are duped with a statement that the testimonials are sworn to on oath as genuine!

We can not forbear in this connection to make a diversion from the subject of the *Lancet's* special mission, in order to notice one of the Rev. Dr. Talmage's proteges, whose advertisement occupies a whole half-page of the *Christian Herald*; we allude to "Dr. Blosser, the well-known minister of the gospel and medical specialist," who is the "originator" of "the only catarrh cure in the world," and whose testimonials from "eminent physicians," "ministers of the gospel," etc., are read by the "hundred thousand readers" of that religious journal every week. He deserves and shall receive from us a free advertisement.—*Boston Medical and Surgical Journal*.

AMERICAN MEDICAL ASSOCIATION.—At the June meeting of the American Medical Association, in addition to their regular programmes, the Section on Ophthalmology and that of Laryngology and Otology will devote the morning of the second day, June 7th, to a joint meeting, under the Chairmanship of Dr. Casey A. Wood, of Chicago, and of Dr. Emil Mayer, of New York. The subject for discussion will be: "The Relation of Ocular Diseases to Affections of the Nose and Neighboring Cavities." Four papers are to be read on this subject, by invitation, as follows: Dr. Charles Stedman Bull, of New York, on "Some Points in the Symptomatology, Pathology, and Treatment of the Sinuses Adjacent and Accessory to the Orbit"; Dr. D. Bryson Delavan, of New York, on "Nasal Stenoses in their Relation to Ocular Disturbances"; Dr. Joseph A. White, of Richmond, Va., on "Eye Troubles Attributable to Naso-pharyngeal and Aural Disturbances"; Dr. J. H. Bryan, of Washington, D. C., on "Diseases of the Accessory Sinuses in their Relation to the Eye." General discussion on the main question.

GUNSHOT INJURIES OF THE SPINE.—Prewitt (*Annals of Surgery*, August) has tabulated 49 cases of gunshot injuries of the spine treated since the beginning of the aseptic era. Of this number, 24, including a case treated by the author, were subjected to operation, with 11 recoveries and

13 deaths; 25 were not operated upon, with 8 recoveries and 17 deaths. The mortality after operation was about 55 per cent in the cervical and 66 per cent in the dorsal region. Of three operations for injury to the lumbar portion, each was successful. The author has arrived at the following conclusions: (1) It is the duty of the surgeon to advise immediate operation in all cases of gunshot wounds of the spine, provided the wound has involved the posterior or lateral parts of the spine at an accessible region, unless the condition of the patient is such as to indicate clearly that he is hopelessly stricken; (2) to wait to see whether nature is competent to restore the damage is to wait until irreparable damage has been done in many cases, as, for instance, rapid degenerative changes, meningitis, and myelitis. The delay permits of the continuance of conditions, the removal of which is the purpose of the operation; (3) the presence of complications due to penetration of the great cavities and injury of their viscera will influence the question of operation, but not necessarily forbid it.—*British Medical Journal*.

THE HOSPITAL PATIENT'S RIGHT TO SECRECY.—Dr. Edmund Andrews (*Journal of the American Medical Association*, January 7th) points out a much-neglected fact that the purposes of clinical instruction and hospital administration apart, and these are by implication waived by the patient on becoming an inmate of a hospital, the hospital patient has as much right to secrecy in regard to his affairs as the private patient. For instance, says Dr. Andrews, a patient in a hospital may have a claim, or perhaps a suit against a railway company for injuries received on its line. The hospital or its officers may not furnish to the railway company, or to any outside parties, any information about the injuries without the patient's consent. A patient may have syphilis, and the disease may be shown and fully explained to the clinical class, but it must not be divulged to his inquiring neighbors and friends, unless he desires it, which he probably does not. An agent of an accident insurance company often inquires about the condition of an injured patron, but it is not proper to inform him, unless the patient wishes it, and so of all other cases. The personal honor and the legal obligation of the surgeon are pledged to preserve the patient's secrets, except where necessarily waived for hospital purposes. The growing tendency to make sensational paragraphs for newspaper purposes out of the ailments of hospital patients renders this warning specially apposite, for it may be reasonably assumed that the information could not, in many instances at least, have been obtained without a grave dereliction of duty on the part of some of the hospital staff—doctors, nurses, students, or attendants—all of whom are in honor equally bound.—*New York Medical Journal*.

THE OTHER KIDNEY IN CONTEMPLATED NEPHRECTOMY.—Edebohls (*Annals of Surgery*, April, 1898,) insists, on the strength of long experience, that before extirpation of the kidney a knowledge of the presence and con-

dition of its fellow becomes of paramount importance. The aids to such knowledge are examination of the urine, palpation of the kidney, cystoscopy, catheterization of the ureters, skiagraphy, the fluoroscope, and lastly—not first—exploratory incision. The presence of a second kidney is determinable by most of these aids, but Edebohls admits that none except incision can in all cases give completely satisfying information regarding the exact condition of the other kidney. He further warns us that in cases of pyrexia and tuberculosis of vesical or of unilateral renal origin, catheterization of the ureters involves the risks of infection of a previously healthy ureter and kidney, and should be avoided. Though averse to haste in making an exploratory incision, Edebohls does not scruple when in doubt to make a lumbar incision, to deliver through it and then examine the fellow of the kidney, previous to completing an otherwise indicated nephrectomy. For modern surgery, he declares, with improved methods and technique, has rendered lumbar exploratory incision a safe and expeditious procedure, the most and generally the only reliable one for determining the exact condition of the other kidney.—*British Medical Journal*.

PUBLIC BATHS AND GYMNASIA.—Mayor Quincy, of Boston, delivered an illustrated lecture on Public Baths and Gymnasia before the People's Institute at Cooper Union, New York City, on January 23d. He argued that it was better to construct baths and gymnasia with money from the public treasury than to depend for them on private philanthropy, and that the providing of baths was just as essential a function of a municipality as the providing of schools. In the education of children physical training should be as carefully looked after as mental culture, and public schools, he thought, should be equipped with both baths and gymnasia. After stating that both Germany and England were still ahead of this country in the matter of public baths, he gave an interesting account of the development and present condition of the public baths and gymnasia of Boston.—*Boston Medical and Surgical Journal*.

PROFESSOR ROENTGEN DECLINES.—It is now announced authoritatively that Professor Roentgen has refused to accept the call to the University of Leipzig to succeed Professor Wiederman, who will retire at the end of this semester. Professor Roentgen prefers to retain his present position, that of Professor of Physical Sciences at the University of Würzburg.—*Medical News*.

IN the death of Dr. Charles Fayette Taylor, which occurred at Los Angeles, Cal., January 25th, the profession loses one who may justly be termed the strongest force in American influential orthopedic surgery—now well recognized as a branch of the profession in which the American medical fraternity can take personal pride.

Special Notices.

TABLET NERVITONE.—William R. Warner & Co. are introducing a new tablet to the profession.

The formula comprises active ingredients of a nature well calculated to fill the want of a good nerve tonic.

Messrs. Warner & Co.'s preparations are so long favorably known that this new preparation will no doubt receive something more than passing notice. We recall the introduction some three years ago of Tono Sumbul Cordial (Wm. R. Warner & Co.).

The rapidity with which it found favor at the hands of the profession is evidence that while a great deal is no doubt due to excellence of the formula, it was largely owing to the fact that all "Warner" preparations have a known therapeutic value and do just what is claimed for them.

Messrs. Warner & Co., introducing Tablet Nervitone, write: "When the indications are for a prescription to correct asthenia, neurasthenia or nerve exhaustion, whether the result of debilitating diseases or excesses, we have in Nervitone Tablets a remedy which will give satisfactory results. Being a combination of well-known nerve-tonics and stimulants, Tablet Nervitone will fill a wide field of usefulness in physicians' prescribing." Many of the so-called tonics contain coca and other substances calculated to produce that distressing condition termed the "drug habit," which necessitates a continuance of the drug or a withdrawal of the remedy at the expense of great suffering. Tablet Nervitone should be given a trial.

SANMETTO IN ENURESIS DIURNA ET NOCTURNA.—Some years ago my attention was called to Sanmetto as a remedy for troubles of the genito-urinary organs, particularly in men past middle life, and I have had some very gratifying successes with its use. Recently I was called upon to prescribe for two boys, eight and ten years of age respectively. Every thing had been tried, including whipping, to break up the "habit" of wetting the bed at night, and one of them also his clothing in the day time. It occurred to me that Sanmetto would be worth trying, and to the delight of every one concerned it has been perfectly successful; and now for the past six months and twelve months respectively, these boys have been entirely cured of this unfortunate "habit." Undoubtedly the trouble was due to irritability of the prostate and mucous membrane of the bladder; hence the prompt and permanent relief afforded by Sanmetto. I have written these few lines hastily, calling the attention of the profession to these cases, with the hope that others will try the same remedy for the same "habit."

JAMES A. STEWART, M. D.

Baltimore, Md.

GRATEFUL TESTIMONY.—*The Imperial Granum Co., New Haven, Conn.*: Dear Sirs: I feel assured you have the best food preparation on the market. I had a son, a soldier, come home low with typhoid fever. I used the Imperial Granum and it acted like a charm. He is now well. It allays inflammation, reduces fever, quiets the patient, and is a great blessing. I wish you a happy Christmas.

Newport.

— M. D.

I TAKE great pleasure in offering my testimony to the great value of Cactina Pillets, in cases of weak and irregular action of the heart. I have used them for four years and have never been disappointed in them. They not only stimulate the heart, but improve that organ permanently. I find them very useful in all cases of typhoid fever and pneumonia.

Kent, Ind.

C. B. MATTHEWS, M. D.

I HAVE used Peacock's Chionia and find it very effective. I shall continue to prescribe it in my practice.

New York, N. Y.

A. P. DALRYMPLE, M. D.

THE AMERICAN PRACTITIONER AND NEWS.

"NEC TENUI PENNĀ."

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No. 4

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

ANEURISMS.*

BY W. O. ROBERTS, M. D.

Professor of Surgery and Clinical Surgery in the University of Louisville.

This patient, Mr. J. P., is thirty-four years of age, with a good family history. He has had typhoid fever and gonorrhea, but not syphilis. He worked at the coopers' trade from boyhood up to four years ago, when he gave up his trade and did practically nothing for two years; he then took a position as carrier of brick and mortar for house-builders. He has been a moderate drinker all his life, but drank a great deal while not at work.

In August, 1897, he began suffering with cramps in his right leg; these cramps were worse at night and when the patient was on his feet. About a month after the cramps were first noticed, while rubbing his limb he detected a swelling in the popliteal space of the right leg. This tumor was about the size of a guinea-egg. It gradually but steadily increased in size until he appeared at my clinic at the University of Louisville, in December, 1897. At that time the mass almost completely filled the popliteal space. Pulsation very expansile; bruit very distinct. The foot and leg below were markedly edematous; the knee was semiflexed and could not be completely extended. The patient walked on his toes with the aid of a crutch and cane. He was put to bed on December 19th preparatory to operation.

On December 21, 1897, two days later, at my clinic at the Univer-

* Patient presented and report read before the Louisville Medico-Chirurgical Society, January 27, 1899. For discussion see p. 127.

sity I ligated the femoral artery at the lower angle of Scarpa's triangle; a catgut ligature was used. Immediately on tying the artery the pulsation in the tumor ceased, and it has never recurred.

The patient was kept at the University Infirmary about one month, at the end of which time the tumor had diminished in size to about one third of its original volume. It was then quite solid; the edema of the foot and leg had entirely disappeared, and the leg could be completely extended. He was then discharged as cured, and I saw nothing more of him until a few days ago. Upon examination I find the tumor entirely gone and the leg in good condition. Pulsation of the posterior tibial artery in the lower third of the leg can be felt. The foot of the affected side is more susceptible to the influence of cold than the opposite foot. Barring this, the patient says he sees no difference in the two legs.

CASE 2. I have another case operated upon last December. This man is sixty-five years of age; he is a colored man with a good family history so far as he knows. Until thirty-five years of age he worked on a farm, then as a teamster in the city for about six years, and since then he has been driving a hack or baggage wagon. He gives no history of syphilis; has been a steady drinker of whisky for the past ten years, taking from three to five drinks a day. About a year ago, while rubbing his knee with a liniment for supposed rheumatic pains, he discovered a small lump about the size of a partridge egg in the popliteal space of the right leg. It was at first painless; gradually increased in size and became painful and tender to the touch.

About six months later the foot and leg began to swell; the tumor gradually but steadily increased in size and became more painful, especially at night, or when on his feet. Edema of the foot and leg increased in proportion to that of the tumor in the popliteal space.

When he appeared at my clinic December 14, 1898, the foot and leg were very edematous, and the tumor not only filled the popliteal space but extended a short distance above it. Expansile pulsation and bruit were very marked. The knee was flexed almost at right angles, and could not be extended. I was little afraid on account of the great swelling that there might possibly be some destruction of the structures of the knee.

On December 14, 1898, I ligated the femoral artery at the same point as in the other case, after having kept the man in bed two or three days preparatory to the operation. The patient, on coming from

under the influence of the anesthetic, noticed immediate and complete relief of pain in the limb, caused by the aneurism, and the only discomfort complained of afterward was some numbness of the foot and leg. He was kept in the infirmary for three weeks, at the end of which time there was marked diminution in the size of the tumor, and it was quite firm. The edema below had entirely disappeared. Without our knowledge or consent he left the infirmary at the end of three weeks and walked to his home, about three squares distant. Improvement has been steady since then, and now the tumor is about half as large as it was at the time of the operation. There has been no return of the pulsation or bruit.

I would have had this patient here to-night but he lives in the third story, and I did not care to have him climbing up and down stairs. He is able to walk about the house in comparative comfort. I saw him this morning and examined him carefully with Drs. Bloch, Butler, and Ballou; the tumor is firm and solid. He can perfectly extend his leg; the edema has entirely disappeared below; there is no pulsation in the tumor, and it has diminished in size at least one half. I expect to show the man before this Society at its next meeting.

I bring these two cases before the Society and report them in order that they may be added to similar cases that I have already reported. I have so far had the most marked success with the Hunterian operation for aneurism; in fact, I have never seen a case in my own practice or that of my friends where failure to cure the aneurism has occurred. Success has followed every operation, and in one of the cases that I have already reported the aneurism extended nearly up to Scarpa's triangle, and ligation was of the external iliac artery.

The operation performed upon these two men (the Hunterian) is not so popular as it used to be, judging from modern literature, and its place is being taken by the operation of Antyllus, that is, extirpation of the tumor, after having ligated the vessel above and below. The following extract is from *An American Text-Book of Surgery*:

"The special advantages of extirpation of the aneurismal sac over proximal ligation, compression, or any other method are the removal of danger of emboli which might cause gangrene, the absolute permanency of the cure, the absence of secondary hemorrhage, the freedom from sepsis, and finally the lessened mortality. The mortality of proximal ligation has been placed by Delbet at eighteen per cent, that of total extirpation of the sac at eleven per cent; the occurrence of gan-

grene after proximal ligature about eight per cent, after extirpation only three per cent. Ransohoff collected twenty-eight extirpations of major aneurisms of the extremities without a single death."

These statistics are surprising. I may have struck a fortunate lot of cases, since all resulted in perfect cure. In the one last reported to-night I hardly expected a favorable result, owing to the size of the tumor, the very marked edema below, and inability on the part of the patient to get his leg at more than a right angle. I was apprehensive that it had gone too far to be benefited by this operation, but the result I believe will be a perfect cure.

LOUISVILLE.

LITHOLAPAXY: REPORT OF CASE.

BY A. H. BARKLEY, M. D.

The operation for stone resolves itself into two procedures—crushing or litholapaxy and lithotomy or cutting. Litholapaxy is an operation that is almost devoid of danger, and should be given the preference in all cases if possible, and I believe that there are very few cases in which this method can not be employed.

It has many advantages and few disadvantages. It is much more preferable to lithotomy for the following reasons: (1) No cutting is necessary, unless the meatus be very small, and this is a trivial matter, and no open wound for infection is made; (2) it can be employed at nearly all ages; as is well known it gives a lower mortality at the extremes of life than any other operation; (3) the patient suffers little if any after the operation, and is up and about in a very much shorter time than after lithotomy; (4) the mortality at all ages is much lower after it than after lithotomy, as Thompson collected nine hundred and thirty-two cases operated on by litholapaxy, perineal section, and supra-pubic cystotomy; of this number, eight hundred cases by litholapaxy, with forty-six deaths; one hundred and fifteen perineal sections, with forty-three deaths, and seventeen cases of supra-pubic cystotomy with forty deaths.

The chief disadvantages to litholapaxy are, (1) wounding the bladder and uretha, (2) leaving fragments of stone behind to form a nucleus for another stone, and (3) requiring a little longer time, and the blades of the lithotrite may become clogged. Wounding the bladder and

uretha can be avoided, I believe, in nearly every case, if proper care is taken to inject sufficient quantity of water to distend its walls, and the greatest care exercised after the stone is seized to see that the instrument is freely movable; if the uretha has previously been sufficiently dilated, no harm is likely to result unless the instruments are carelessly used, or with an undue amount of force. The leaving of a fragment behind may in the vast majority of cases be avoided if the washing has been thorough and the canal dilated sufficiently. I have seen quite large fragments pass after operation without the patient suffering any inconvenience. The bladder should be thoroughly searched for fragments, both at the end of the operation and several months later. The time required is a little longer than is required for lithotomy, but this is of little importance when we consider the short time in which one recovers from the operation. The clogging of the blades may be obviated by using the fenestrated instrument.

Mr. N., aged forty-nine, white, came to me on January 5, 1899, and the following history was obtained: About ten years ago he began to have trouble in passing his water; paid little attention to it at the time, thinking it would pass off; for a period of three months he apparently was better, but at the end of this time he again had trouble and passed some mucus, which alarmed him, so he consulted a physician, who prescribed Lithia tablets. He continued to have trouble from time to time, taking first one thing and then another without effect. About four months before he consulted me he passed several small stones, ranging in size from a pea on down; he also complained of his water stopping suddenly, which could be relieved when he got in the recumbent position; he could feel the stone when he was subjected to any jarring. He also complained of pain at the end of his penis after urination; defecation was also painful.

I sounded his bladder with a Thompson stone-searcher and detected a stone, the diameter of which measured approximately one and a fourth inches; only one stone could be found.

The examination disclosed nothing of importance with reference to the bladder, no cystitis or inflammatory trouble whatever being present. I advised him to allow me to dilate his uretha so it would admit the lithotrite and tubes, and if crushing was not successful to do median lithotomy. He agreed, so on January 8th he came to my office; I passed No. 15 American sound; on 10th I passed Nos. 15 and 16; on the 13th he took Nos. 16 and 17; on 16th Nos. 17 and 18 were passed.

I found it necessary to cut the meatus to No. 22 American; on the 19th I passed Nos. 18 and 19; on the 22d Nos. 19 and 20, and on the 24th Nos. 20 and 21 sounds were passed. He was taking an alkaline diuretic all the time and suffered no inconvenience from the rapid dilatation, and only once did his urine contain any mucus and look cloudy, which was very promptly relieved by ten-grain doses of boric acid three or four times a day for two or three days.

On January 25th I operated on him; after he was anesthetized I passed No. 21 sound; after this his bladder was thoroughly irrigated with three-per-cent boric acid solution, leaving from eight to twelve ounces of the solution in. The lithotrite was introduced into the bladder and the blades opened and closed two or three times before the stone fell within its grasp; finally the stone was seized and broken. The fragments were broken as they would fall within the blades; it was with some difficulty that some of the pieces were found.

I found the stone was very soft, and could be crushed by pushing the male into the female blade. Only three or four times did I apply the pressure afforded by the screw.

After repeated crushings Biglow's washing-bottle and tubes were used. A No. 18 American curve tube was passed into the bladder and connected to the bottle, filled with warm boric acid solution, three per cent; pressure on the rubber bulb caused much debris to fall into the glass bulb below. The lithotrite was again used, and the bladder was given its final washing, and from six to eight ounces of boric acid solution was left in the bladder.

The patient was removed from the operating-room; he reacted nicely. There was no acceleration of the pulse or rise in temperature following the operation; he was allowed up on the following Monday; he passed some small fragments; on Tuesday I searched his bladder and found no fragments; he went home on Wednesday, one week after the operation. I have seen the patient since his return home, and he does not have to get up at night to empty his bladder, and feels entirely free from any of the disagreeable symptoms he had prior to the operation.

Through the kindness of Prof. Alfred Peters, of the State College, some of the stone was analyzed; he says it is composed of cystin, which is of course rare. The fragments collected weighed 350 grains.

LEXINGTON, KY.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, January 27, 1899, the President, Thomas Hunt Stucky, M. D.,
in the chair.

The essay was read by Dr. W. O. Roberts, subject "Aneurisms."
[See p. 121.]

Discussion. Dr. H. H. Grant: I have had under my personal care four cases of aneurism of the popliteal artery, in three of which I attempted to cure the condition by compression with relays of students to make digital pressure, reinforced by a tourniquet that I arranged for the purpose. In two of these cases success was attained, with entire cessation of pulsation and cure of the aneurism so far as I am able to report at this time. Both patients became entirely well and were sent away from the clinic. In the third case, a white man, the ligature was applied without other treatment; he recovered promptly without event. Two of these patients were under my care about three years ago. A fourth case very recently, only a few weeks ago, a colored man about thirty-five years ago, with a tumor as large as a goose egg in the popliteal space, with but moderate trouble in the leg beyond pain, with a distinct bruit, marked expansile pulsation, a great deal of pain, but not much edema. In this case fourteen hours of digital compression was made by relays of students. It was easy enough to shut off the circulation during compression, but the effort was made during the night and I could not be present at the trial, and the result was not satisfactory. The next morning I found there was still more or less pulsation in the artery, which increased during the day, and the pulsation the day following was fully as strong as before. There appeared to be some hardening, however, in the aneurism, and evidently a partial clot had formed. Two weeks ago last Monday I ligated the femoral artery at the apex of Scarpa's triangle, perhaps a little lower down, pulling outward the sartorius muscle, getting within five and a half inches of Poupert's ligament. It so happened that the nurse in preparing the patient for operation understood that the operation was to be

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

done in the popliteal space and only prepared that space, so when I came to ligate the vessel after the patient was anesthetized and on the table, I found the field had not been properly prepared. The result of this was the development of a small stitch-hole abscess, which showed probably a tablespoonful of pus in four or five days. This has now closed. The patient would be able to walk about the ward, although it is not yet three weeks since the operation was done. He is not allowed to do this, but is able to get out of bed on the commode or sit in a chair without any trouble. There is about half an inch difference in the size of the foot by measurement across the toes and over the ankle. He has no pain, and his general condition is entirely satisfactory. In this case there was a history of syphilis. In two of the other cases in which this form of aneurism appeared there was also a history of syphilis. Whether this had any bearing upon the successful treatment by compression I am unable to say. It is certainly difficult to get a satisfactory history of syphilis in the colored man, because he pays very little attention to the initial lesion, the eruption, etc., and he is prone to deny that he has had any thing of a serious nature. Still, in the last case mentioned there was a distinct history of the initial lesion, although he denied ever having had a secondary eruption; he had, moreover, taken a course of anti-syphilitic treatment. In the fourth case there was no attempt made at compression. In none of these cases was there a tumor of any great size, not larger, perhaps, than a double fist, and in the fourth case I made no attempt at compression, but applied a ligature. All of them have gotten well without any trouble; the tumor in each instance has completely gone or was greatly lessened in size at the time the patient passed from observation. I have not heard of any of the three cases in a year or more. I do not know, of course, that they are entirely well, but there is every reason to suppose they had no recurrence.

With respect to the safety of this treatment, my experience has been like that of Dr. Roberts, viz., it is attended with little or no difficulty, and the result is eminently satisfactory. I think excision is not usually approved by surgeons for small aneurisms; in those of greater size, where there is the risk of considerable clot, and greater danger perhaps of infection, it is perhaps an appropriate step to attempt excision of the aneurism, but the traumatism of such a step is greater than that of simple ligation. I think I am not mistaken in saying the voice of the general profession is against the excision of aneurisms of

moderate size; but in those like Dr. Roberts described, where there is likelihood of considerable clot, greater risk of septic infection, the propriety of excision is approved by the profession generally.

Dr. A. M. Vance: It has never been my fortune to operate on a case of so-called idiopathic aneurism. I have operated three times for traumatic aneurism of the femoral artery, and in one of the cases I attempted to excise the sac, which I must confess is a very tedious and difficult operation to perform. It happened that there was an immense aneurism involving both the artery and vein, so that both had to be taken away. The man recovered and was exhibited before a meeting of this Society several years ago. The aneurism was due to a piece of steel having entered the femoral, passing through. The other cases were the result of gunshot wounds, both of which have been shown to this Society. In one case there was a large aneurism of the femoral, which was tied on each side and the sac cleaned out. In the other the femoral was tied in Scarpa's space. All the patients recovered.

Dr. T. L. Butler: I had the pleasure of seeing Dr. Roberts' case, and simply desire to congratulate him upon the result.

Dr. W. O. Roberts: In former years I tried the treatment of idiopathic aneurisms by compression, both digital and instrumental, and never had any success. I remember as a student, and perhaps others present can recall instances where compression was tried in cases at Dr. Yandell's clinics by relays of students, who worked with the patients until the part compressed would become so tender that the patients could stand it no longer—and yet no decided improvement resulted. I can not say that I have ever seen any marked benefit result from that method of treatment. I remember, however, one case treated by Dr. Yandell by means of the Esmarch bandage with perfect recovery. In that case the tumor was small, and the Esmarch bandage was allowed to remain on for three quarters of an hour. I had charge of the case at the time, and the man had a complete cure. No trouble followed the use of the bandage. But a number of cases of gangrene have been reported following this method of treatment, and I have always been afraid of it since. It is claimed that where failure has resulted from treatment by compression, that it is very apt to also follow treatment by means of the ligature, but I have never seen that occur.

I have never attempted to extirpate an idiopathic aneurism. This was the old operation ; it was first done in the fourth century, and up to the eighteenth century no other operation was attempted. The Hunterian operation was first performed in 1785. I have never had occasion to do either the Basdor, the Wardrop, or the Annel operation. I have confined my work so far to the Hunterian operation. I have seen extirpation done in one case by Halsted. The patient was a negro with a very large tumor of the first portion of the axillary, rather involving the first portion of the axillary and third portion of the subclavian. I understand the patient got well, although the operation took a long time. In this case he had to tie the viens as well as the arteries. It is the only case of total extirpation of the aneurismal sac that I have ever witnessed.

Case in Pediatrics. Dr. H. A. Cottell: About three weeks ago I had a case in pediatrics which shows how easy it might be to miss the diagnosis utterly in the convulsions of children. A child fifteen months old had a little spasm previous to the time I saw it ; the spasm did not amount to much, and I was satisfied it was due to indigestion. The convulsion was easily controlled with bromides and chloral, and the child went along in as good health as before.

Two weeks from that time I was called in haste to see the child about ten o'clock in the evening. When I reached the patient it looked as if the game was up. The child had been in spasms for more than an hour. It was almost pulseless, totally unconscious, face drawn to one side, and there was a peculiar clonic spasm of the upper extremities which we so often see in acute hydrocephalus. I noticed that the abdomen was considerably ballooned. Of course I made a very unfavorable prognosis. I ordered calomel, two grains on the tongue, and gave chloral by enema. I told the father that the disease had gone to the brain. I thought it a case of effusion. I said the child would probably die in a few hours, but if it did not die before midnight or was not very much better, to telephone me. The next morning about seven o'clock I was again called to see the child. I was surprised that the child was still living. The bowels moved in an hour after I was there the evening before, the child had awakened from coma, the convulsions had ceased, and it had gone into natural sleep which lasted till morning. Indeed, it showed little or no signs of having been sick the night before.

Here is a case in which I gave the gravest prognosis, yet the child made a prompt recovery.

Such cases go to show the profound systemic disturbance which may follow from gastro-intestinal irritation, and also counsel us to go slow in making a grave prognosis.

Discussion. Dr. William Bailey: I would only speak of one question in regard to the first case, viz., as to whether any influence was exerted by Dr. Cottell's treatment, evacuation of the bowels taking place one hour after the administration of calomel, whether the case would not have done as well without the calomel. As a rule I do not believe we find that purgation takes place in one hour after the administration of two grains of calomel on the tongue. Probably as a result of the gastro-intestinal irritation nature itself brought about relief. I do not think the calomel did any harm, but I doubt very much whether the purgation one hour after the administration of calomel, as stated, was due to this simply.

Remarks on Appendicitis. Dr. A. M. Vance: Last Saturday I had occasion to operate upon a man which illustrates a rather unusual phase of appendicitis, an abscess which was located entirely back of the peritoneum, and the pus was evacuated in the loin, and an enterolith was taken out, proving the diagnosis. At the same time Dr. Roberts was called to the infirmary to operate upon a little boy for appendicitis. Before the operation could be performed the boy died. The same afternoon about five o'clock I was called to New Albany to see a boy with appendicitis. Before I could reach there he was dead.

I mention these cases in proof of the fact that a good paper ought to be written upon the subject of appendicitis, as there is much yet to be known concerning it. These two children make seven cases that have died from this disease in the last twenty-four months in and about Louisville, and certainly there ought to be a better understanding among physicians in regard to these cases, because I am sure if these seven children had been operated upon, a fair proportion would have recovered. It does seem to me with the amount of literature on this subject which we already have and our present knowledge of the disease ought to make us see that the sooner such patients are operated upon the better the chance of saving their lives.

Dr. L. S. McMurtry: I observed in the Medical Record last week a communication from Dr. John A. Wyeth, reporting a case of suppara-

tive appendicitis discharging at the umbilicus. It was reported as an exceptional feature of the disease. Three years ago I had a similar case. Dr. Vance saw the patient with me. The patient was a girl of fifteen, who had been brought from her home in the southern part of the State. She was emaciated in extreme degree; the abdomen was enlarged, and a small stream of pus was trickling through a pin-point opening at the umbilicus. I operated at once by incision in the median line, and found the largest pus cavity I have ever seen. After evacuating the pus and irritating thoroughly, I made use both of tubes and gauze for drainage. The cavity was several months in closing, but the process of repair was active and continuous, and healing was complete. This girl was so long ill before operation, and so reduced by prolonged suppuration and sepsis, that she was for a long time stooped. Last June she called to see me and was rosy, erect, and had developed beyond all traces of her severe illness of three years ago.

I am reminded in this connection of another unusual pointing of appendicular abscess, which occurred in a case treated in consultation with Dr. Cecil. The patient is a maiden lady of thirty-five, and had suffered for several months with pain in the right lumbar region, without any definite symptoms being present. There was nothing to be found anteriorly to suggest appendicitis, and perinephritic abscess was suspected when we detected deep fluctuation posteriorly. This lady is the subject of organic heart disease so pronounced that we did not care to anesthetize her. With local anesthesia I made an incision through the right lumbar region at the point of fluctuation. The pus flowed freely and was of the characteristic intestinal odor. Drainage was established, and complete recovery followed.

These cases illustrate the varied and devious routes of pointing in suppurative appendicitis.

Dr. Wm. Bailey: As a doctor, not as a surgeon, I want to speak of some recent experiences in connection with appendicitis. About six weeks ago I was called, because I was not a surgeon, to see a case in consultation that had been under observation but a few hours; that was three o'clock in the afternoon. The patient was operated upon before five o'clock, and made a satisfactory recovery. A week or ten days ago I was called in the night for the same reason to see a child suffering with appendicitis. The parents absolutely refused to have a surgeon called, because they did not want the knife used; but the patient getting no benefit from medical treatment, by the joint advice

of the attending physician and myself the patient was operated upon the next day, and is now ten days in convalescence. Last Thursday I saw another case under exactly similar circumstances, the patient having what was thought to be colic in the afternoon of Wednesday, and had received two or three hypodermic injections of morphine and getting some degree or comfort therefrom. The man really was out attending to business two or three hours on Wednesday, then went home as he was suffering some pain, not having, however, any elevation of temperature at that time; but during the night more or less reaction came on, and I saw the case yesterday afternoon (Thursday) at three o'clock; he was operated upon at four o'clock, and reports are satisfactory to-day. As a doctor this is my recent experience with appendicitis.

Dr. H. A. Cottell: Dr. Vance suggests that a paper be written on the subject of appendicitis which would be of benefit to the every-day doctor. I know of no one better qualified than Dr. Vance to do so. I hope he will write a paper and present it before this Society on the Indications for Operation in Appendicitis. In the first place, in a great many cases of appendicitis the diagnosis in the beginning is extremely obscure. If you can make out a tumor, it is in such cases as usually get well without operation. If there is not a tumor you do not know whether you have an appendicitis or not until it is perhaps too late for the surgeon to operate. Problems of this nature are always in the way of the physician. My experience with appendicitis has been very peculiar. I have seen a good many cases. Most of them have gotten well by expectant measures. I recall four recent cases, two in my own practice, the third seen in consultation; the fourth was practically under my care, a child with appendicitis in which the surgeon was called and refused to operate. Perhaps he was not called in early enough. If the surgeon would tell us when he ought to be called, it would be of immense advantage to the doctor. If he says as soon as the patient has pain in the right iliac fossa, it would mean that over one half the cases of ordinary colic would call for a surgical consultation. There ought to be some rules laid down for the doctor, formulated by the surgeon himself, in order that the golden moment may not pass by.

Dr. L. S. McMurtry: In view of the remarks just made by Dr. Cottell, I deem it my duty to say a few words in reply. In the first place, I am sure when the doctor declares that we very much need information as to when operation should be done in appendicitis and when the

surgeon should be called, that he has for the moment forgotten the numerous papers and discussions upon these points with which the medical literature of the past five years is teeming. It is generally conceded that a surgeon should be called as soon as appendicitis is suspected, and that the question of operation should receive attention as soon as the diagnosis is made. The consequences of delay and expectancy are well known; they are illustrated by the report which introduced this discussion. The way to look at this question is to consider whether, measured by results, timely operation is as dangerous as delay and expectancy. In skilled hands, with proper environment, the operation of opening the right iliac fossa is of minor danger in comparison with the results of perforation, infection, and suppuration characterizing this deadly disease.

The influence of such remarks, emanating from so distinguished a teacher and practitioner, is harmful; and convey very inaccurate ideas as to when a surgeon should be called and the indications established for operation in appendicitis. That subject has been so thoroughly discussed, and there is such unanimity of opinion among physicians and surgeons, that there is no place for further argument.

Dr. A. M. Vance: I recall two more cases I have had where appendicitic abscesses made their way to the umbilicus; both were in children and both were girls. In both cases the abdominal parietes had been dissected up from the peritoneum over the whole extent of the anterior surface from loin to loin. Both of them recovered after opening the abscess below the umbilicus. I remember perfectly well the case Dr. McMurtry mentioned, which was a little different from the two just referred to, because in his case the pus was intra-peritoneal. In both my cases it had opened between the peritoneum and the muscular wall, and had dissected its way to the point of least resistance, which was the umbilicus. I certainly must agree with Dr. McMurtry that there has been written within the last few years more upon the subject of appendicitis than any other surgical subject, and there is a most perfect consensus of opinion as to what should be done. I am sure just as soon as the diagnosis of appendicitis has been made, that the surgeon ought to be called.

I mentioned the cases in my report simply to emphasize the fact that in the last twenty-four months I had known of seven children dying from appendicitis, where the surgeon was not called until they were moribund or dead, and that perhaps all could have been saved by timely operative interference.

As to Dr. Cottell's idea that those cases where an abscess or tumor forms are the ones that get well without surgery, this is certainly an error, because I am convinced that a proportion of these cases die from rupture of the abscess into the peritoneal cavity.

Dr. H. A. Cottell: In the first place, I did not understand that an abscess is always formed in those cases of appendicitis exhibiting a tumor. Do not some cases terminate by resolution? Again, there may be an abscess which may discharge by the bowel or bladder, with no evidence of pus breaking into the peritoneal cavity. I believe that cases in which we find a decided tumor, where the bowel is empty, no fecal matter being present, and no gas, may and do terminate by what we used to call resolution, no abscess being formed. In such a case the diagnosis of appendicitis may be made, and such cases often get along without surgery; but there are a great many cases where the diagnosis is extremely obscure. Experts in abdominal surgery like Drs. McMurtry and Vance might make a diagnosis where I would be deceived. There is certainly and necessarily a great deal of obscurity and uncertainty as to the diagnosis of appendicitis in the early stages, and it seems to me the surgeons ought to tell us, if they can, how to make it. Perhaps they will reply that when we even suspect a case of appendicitis, call a surgeon.

The appendix vermiformis has been regarded as a sort of anatomical mystery; for a considerable time all kinds of theories were advanced to account for it. Evolutionists say it is a remnant of lower animal life. I used to be inclined to that opinion, but of recent years I have come to the conclusion that it is an especial dispensation of providence for the benefit of the surgeon.

Dr. F. C. Wilson: Those cases of appendicitis which give us the most trouble are what have been termed the catarrhal form, those that resolve without suppuration. We recognize them as suspicious cases because inflammation of the appendix can sometimes be made out distinctly, and yet the evidence of suppuration is not sufficient to justify us in calling the surgeon.

I want to emphasize one particular feature in the care of these cases; supposing that the evidence of inflammatory action will subside without becoming urgent enough to seek the surgeon, what is the proper course to pursue in dismissing the case? In order to illustrate and emphasize this, I want to mention one case that occurred in my own experience, where I believe I erred in the way in which I dismissed

the case. I was called to see a young boy and recognized his case as one of appendicitis. I told the mother that if there was no change for the better the next morning (I saw him during the night) that I would insist upon a surgeon being called. The next morning, perhaps unfortunately, the boy was better. The inflammation seemed to subside, and finally resolution took place without the necessity for an operation. When I dismissed the case I said to the mother, "most likely these symptoms will recur, and if they do, there ought to be no delay in a surgical operation." In that mode of dismissing the case I recognize now that I made a serious mistake. I ought to have said to the mother, now if these symptoms recur, send for me without any delay, without mentioning the surgeon's name in connection with it. Six months later that boy was taken sick in exactly the same way; the mother was afraid to send for me, because she knew what my advice would be. She sent for another physician who had not seen the patient before, and who knew nothing about the previous attack. He watched the case for several days, and finally came to the conclusion that a surgeon ought to be called; one was called, but he decided that it was too late, and the boy died.

I simply want to caution physicians against falling into the same error that I did in their mode of dismissing these cases. Be careful not to alarm the mother by putting into her head the idea that an operation will certainly be needed. Simply caution her to call you as soon as the symptoms recur, as most likely they will recur sooner or later. We know that recurrent cases of appendicitis sooner or later reach the point where the surgeon's knife is needed, as death results without it.

LOUIS FRANK, M. D., *Secretary.*

NEW YORK ACADEMY OF MEDICINE—SECTION IN ORTHOPEDIC SURGERY.

Meetings of December 16, 1898, and January 20, 1899.

Shortened Pectoral Muscle. Dr. R. Whitman presented a patient, a girl eleven years of age, who could not raise her right arm more than thirty degrees above the horizontal. The cause appeared to be obstetrical paralysis. Round shoulders and curvature of the spine were present. He had advised division of the unyielding contraction of the

lower border of the pectoralis major muscle, which presented a thick, fibrous cord beneath the skin.

Dr. A. B. Judson said that the contraction might have resulted from a paralyzed deltoid which had failed to give normal extension to the pectoral.

Dr. Whitman said that there was a very fair development of the shoulder muscles, and that the curvature of the spine could not be relieved until the contraction that prevented the child from lifting her arm over the head was removed.

Tuberculous Knee and Athetosis. Dr. Whitman presented a girl ten years of age, who had been under observation for nine years. When one year old and under treatment for disease of the right knee she had a convulsive attack, which was followed by right hemiplegia. The return of voluntary power was accompanied by constant convulsive movements of the face, arm, and leg, which had continued to the present time and had made treatment of the knee a matter of great difficulty. In spite of splints, traction, and plaster of Paris bandages, the convulsive movements of the leg had caused severe pain and prevented repair, so that the local disease was still uncured. But for the youth of the patient, amputation would have been done. The case illustrated the advantage and necessity of rest in the conservative treatment of joint diseases.

Cases of Doubtful Diagnosis. Dr. W. R. Townsend presented a boy, eleven years of age, who fell from a car three months ago, and had complained of pain in the left hip ever since. Six weeks ago, when he was first seen, there was symmetry in all the measurements of the lower extremities, but the affected hip showed considerable resistance to motion in any direction, which could sometimes be partly overcome by persuasion and considerable force. Manipulation was painless. He stood and walked with the left foot, leg, and thigh everted or rotated outward ninety degrees, and this persisted. By the use of considerable force the limb could be rolled in, but when released it flew back to its old position. Every muscle reacted perfectly to galvanism and faradism. Tincture of iodine had been used locally, and his locomotion had improved a little. A probable diagnosis of hysteria had been made by exclusion and because he could with effort stand and walk voluntarily in a normal manner, and because the bad position could be overcome by a steady pressure and without causing pain.

Dr. Whitman said that a faulty position of a limb in an impressionable patient might be considered as a voluntary or unconsciously selected adaptation to some condition following strain or other injury of a joint.

Dr. Townsend said that the statement had been made that injury of the obturator nerve had in some instances caused a similar eversion, but he had not found any recorded cases.

Dr. G. R. Elliott presented a man thirty-two years of age. The family history was negative regarding nervous and bony diseases. Five years ago inability to move the left thigh appeared. When motion returned to the left thigh, the right was similarly affected. Other symptoms which still persisted were burning sensations in the feet, especially in the heels, great difficulty in standing erect and walking, and rigidity of the spine, preventing him from bending backward. Torus palatinus was noted, and there were other degenerative stigmata. The legs were bowed, but otherwise there were no signs of early rachitic changes. The hamstrings were contracted. There was double hallux valgus and pes equinus. The upper extremities were normal. There were no sensory disturbances beyond the paresthesias mentioned. Neurologists had failed to locate any organic nerve lesions. Dr. Elliott was in doubt in regard to the diagnosis. He did not agree with an opinion expressed by some members of the Section that it was probably a case of rheumatoid arthritis, a disease which could not present so much disability with practically no involvement of the small joints, almost painless from the beginning, and with no deposits about the joints. The pain that was present and the disability were due to the various contractions and consequent disuse of the parts implicated.

Cicatricial Contraction of the Hand. Dr. S. Lloyd presented a little boy with cicatricial deformity of the right hand, the result of burns received a year ago. About six weeks ago the little finger, being very much twisted and distorted, was amputated, and superficial tissue was removed from the remaining digits. To replace the cicatricial tissue with normal skin, a flap including a little of the fatty tissue was partially dissected from the abdomen, being attached at the top and bottom. Under this the boy's hand was slipped, and a plaster of Paris bandage was applied. This being removed, the attachment of the fingers to the abdomen was very well shown. At a later stage the flap would be entirely detached from the abdomen. There had been no suppuration.

Meeting of January 20, 1899.

Secondary Pulmonary Osteo-Arthropathy in a Child. Dr. R. Whitman presented a girl, eight years of age, rather undersized, but in fair physical condition. There was moderate kyphosis and rigidity of the spine, the result of Pott's disease of the tenth dorsal vertebra, accompanied by an abscess in the left iliac fossa, for which she had been treated by the application of a plaster of Paris jacket in 1893, when she was two years old. The abscess disappeared, and the patient was recovering favorably till 1896, when persistent cough and expectoration followed an attack of whooping-cough. In 1897 enlargement of the fingers was noted, the gait was feeble and shuffling, and there was pain in the knees and ankles, with exaggerated patellar reflex and ankle clonus, and marked effusion into the knee and ankle joints. The terminal phalanges and the nails were enlarged, and there was cough with abundant expectoration and rales at the apex of the left lung. In 1898 the pain was relieved by the anti-rheumatic administration of salicylate of soda, and although there was a marked general improvement, the swelling of the knees and ankles persisted, and the increased clubbing of the nails had attracted much attention and was thought to be an instance of the so-called hippocratic fingers, due to obstruction of the circulation caused by disease of the lungs. Expectoration was moderate in amount, and bacilli were not found. In October, however, an examination showed thickening and enlargement of the bones of the lower arms, and sensitiveness to pressure and swelling of the wrist joints. This made the diagnosis clear, and at once connected the clubbing of the fingers, the arthritis, and the enlarged bones as symptomatic of the affection known as secondary pulmonary hypertrophic osteo-arthropathy. The child was found to have no psoas contraction or other trace of abscess, and there was apparent recovery from the disease of the spine. There was slight dullness at the apex of the lung, and increased respiratory sounds at the base of the right. The most marked peculiarity was the great size of the hands as compared with the size of the child, and of the lower arms and legs as compared with the upper segments of the extremities, giving the impression of atrophy of the thighs and upper arms. The bones of the legs and forearms were sensitive to pressure. The knees, ankles, and wrists were enlarged by an effusion into the joints and by thickening of the surrounding parts without redness, heat, or muscular spasm. Motion was very slightly limited. The digits were thickened,

and their terminal phalanges remarkably enlarged, with nails rose red in color but not especially thickened or curved. The circumference of the ends of the fingers and the breadth of the nails were about twice as great as normal. This condition was somewhat less marked in the feet than in the hands. The affection of the bones in this disease appeared to be a form of malacia in which the organic material is somewhat increased and the mineral substance correspondingly diminished, so that the structure of the bone is weakened. The characteristic change is a deposit of new bone beneath the periosteum of the shafts of the phalanges, the metacarpal and metatarsal bones, and the lower part of the bones of the lower arm and leg, with local sensitiveness, sympathetic arthritis, and clubbing of the ends of the digits and hypertrophy of the nails. The affection had been first described in 1888 by Bamburger, and independently by Marie, who differentiated it from acromegalia, with which it had been confounded. In practically all of the cases reported, upward of eighty in number, it was secondary to chronic disease of other parts; in seventy-five per cent to tubercular or suppurative disease of the lung or its coverings. The cause of the periosteal and other changes was supposed to be the absorption of irritating substances from the focus of suppuration in or about the lung, combined with impaired circulation. Thus the first evidences appeared in the ends of the fingers. It was a rare disease, and this was believed to be the first typical case reported in a child.

Dr. H. E. Pearse, referring to the great increase in the size of the bones, called attention to the fact that the radiographs showed that the enlargement was longitudinal as well as transverse.

Dr. A. M. Phelps said that he had been impressed with the remarkable bony enlargement. A post-mortem examination of the brain and cord would be of great interest. Acromegaly was due to a tumor or growth in one of the ventricles of the brain, and he questioned whether or not in the case presented there was a central lesion due to poisoning from the diseased area. The lungs had not been sufficiently involved to cause obstructed pulmonary circulation. In tabetic joints there was destruction of bone from a central lesion, and cases of rheumatoid arthritis might perhaps have a similar origin and not have been rheumatism at all. He doubted whether such a thing as a single rheumatic joint existed. They were always multiple.

Dr. R. H. Sayre said that the pathological views presented were not entirely convincing. It was not clear why proliferation of the perios-

teum should visit the phalanges rather than other parts of the skeleton. In a patient affected with a tubercular knee-joint the radiograph had shown a very marked proliferation of the periosteum of the lower end of the femur, and there were marked clubbed fingers. The patient had the appearance of a consumptive in whom the destruction of the lung was far advanced, but her lungs showed no change. In another patient there was the same condition of the fingers, which were more tender some times than at others. Movement greatly aggravated the inflammation, and nothing gave relief but absolute rest.

Dr. H. S. Stokes said that the etiology was far from being established, as might well be in a disease that had been recognized for only eight or ten years. It had not yet been positively determined even that the condition was dependent on disease of the lungs. If it were, why did it not occur more frequently? In the absence of the characteristic bacilli it was not certain that the child presented had tuberculosis. In view of her history it would not have been strange if her general condition had been worse. It was almost impossible to make a diagnosis of lung affections in children with deformed chests. He had seen a specimen of kyphosis from a case in which the diagnosis of tuberculosis of both lungs had been made, and yet at the autopsy the lungs had been found to be normal. Similar cases were not uncommon.

Dr. G. R. Elliott said that if speculation were in order, he would agree with Dr. Phelps that the cause of this rare condition was to be sought for through the central nervous system. There was reason to believe that the cause of various distal bony changes and peculiar vascular phenomena presented by the distal extremities, including great sensitiveness, together with certain well-marked types of so-called osteo arthropathy, were traceable to central lesions. In the patient presented there were clinical and X-ray evidences of a disturbance of the normal equilibrium between the bone-producing and organic-producing cells leading to the enlargement. The signs were bilateral and symmetrical evidences of central irritation. To say that such a condition was associated with a chronic disease meant very little; to say that it was circulatory was untenable. He believed that the explanation would be found in this, that the trophic and vaso-motor cells had been thrown off the track by some poison, be it tubercular or other, circulating through the central nervous system, selective in its nature, and degenerative in its final expression.

Dr. Stokes said that in the five or six autopsies which had been

made no nerve lesions had been found, in spite of careful and thorough examination.

Dr. Elliott said that that was true of other diseases which were considered to be due to central nervous lesion.

Dr. Whitman said that many cases of osteo-arthritis were probably not true examples of the disease in question. In many the only change observed was clubbing of the fingers, which was sometimes seen in cases of simple obstruction of the circulation, described by Hippocrates as a symptom of advanced phthisis, and not very uncommon in cases of empyema of long standing. One fact had been established, viz: that hypertrophic osteo-arthritis was practically always secondary to some chronic disease; in the case presented, for example, to Pott's disease and chronic bronchitis. Speculation as to its cause would seem to be less important than further and more careful descriptions and classification of cases.

Cyst of Femur; Double Coxa Vara. Dr. Whitman presented a boy eleven years of age with evidences of femur rachitis and the usual signs of double coxa vara. For several years he had complained of discomfort and pain in the left hip and thigh, the pain at times being severe, especially after exertion. When about five years of age he was treated by a physician for eighteen months for supposed hip disease, and a year later by the application of a plaster jacket for spinal deformity. On September 8, 1898, an operation was begun for the correction of the deformity of the femora by removing wedges of bone from the trochanters. On removing the periosteum from the upper end of the left femur a peculiar dark color and a somewhat reticulated appearance of the bone were noticed, and at the first touch the chisel broke through the brittle cortex and entered a cavity from which spurted a quantity of serum of the color of prune juice. The cavity was of the size of a hen's egg, its base being shut off from the medullary cavity of the diaphysis by a cone-shaped projection covered apparently with cartilage. Its upper extremity reached about half way to the apex of the trochanter. Its walls were lined by a smooth, fibrous covering which bled freely on manipulation. As it was feared that the inner part of the femur was weakened by the cyst, and as it was evident that union in case of fracture would be doubtful, to restrain hemorrhage the cavity was simply packed with gauze, which was removed at the end of four weeks and the boy began to walk about. The sinus closed one

month later. It was evident that spontaneous fracture, as in other cases of coxa vara, could not have been long delayed. If the symptoms should recur, a second operation for the removal of the walls of the cyst would be indicated. Cysts of the femur were usually found at the extremity of the diaphysis, most often at its upper extremity. A diagnosis before operation had not been recorded. They were said to be the result of softening or transformation of an originally more solid growth of a cartilaginous or fibro-cartilaginous nature, probably a displaced fragment of epiphyseal cartilage.

Dr. Sayre had examined the boy two or three months ago. As he had not offered to operate, the patient passed out of his care. At that time he had taken a radiograph of the hips, and had observed a spot on the femur which might have been the cyst.

Value of Radiographs. Dr. T. H. Myers said that he had tried, but usually in vain, to detect abscesses, tubercular foci, and other lesions in the bones by means of skiagraphy. In a case of abscess of the head of the tibia an area of diminished density at the site of the abscess had been clearly revealed, with increased density about it, similar to the contrast seen between the center and the periphery of a long bone in any skiagraph.

Dr. Phelps said that a radiograph would usually show a shadow where there was a lesion, but it could not tell what it was. He had been deceived by pictures taken by good machines, and had cut down upon lesions which did not exist. It was not possible to diagnosticate lesions of the soft parts by means of radiography, but if an abscess was known to exist it would aid in locating it.

Dr. H. L. Taylor said that radiographs could not, until further improved, be expected to more than indicate certain physical changes in bone. If the structure had become so attenuated by disease that the X-ray could pass, the focus of disease would be indicated, not otherwise. Intelligence and experience should be brought to the interpretation of these pictures, which are subject to all the distortions of shadows and the errors of photographic processes. A radiogram which was said to reveal the epiphyseal line had really shown a crack in the photographic film. He had a picture of tuberculosis of the carpus in which the diseased foci were shown with the greatest clearness. A cyst of the bone would be revealed if the walls were sufficiently thin to allow the rays to pass.

Dr. Whitman thought that all X-ray pictures should be interpreted. They were of great service to one who had clear ideas of what he was looking for.

Pott's Disease : Death Caused by an Abscess in the Thorax. Dr. Whitman also related the history of a boy of four years of age who, with an angular projection at the fourth dorsal vertebra, was subject to occasional prolonged asthmatic attacks of such severity that fatal asphyxiation seemed to be imminent. The character of the dyspnea seemed to warrant a diagnosis of abscess pressing upon the trachea. A plaster jacket and jury-mast were applied with good effect, and a month later the jacket was removed for the purpose of examining the chest more carefully, but the symptoms of dyspnea, caused apparently in part by the removal of the support and in part by the recumbent position, became so urgent that it was immediately reapplied without further examination. The boy died suddenly that evening. The internal organs showed no sign of disease. On removing the lungs and heart a tense, fluctuating tumor was apparent in the median line, the size of a large hen-egg, between the esophagus and the anterior longitudinal ligament, on a level with the upper border of the third dorsal vertebra, its apex at the sixth dorsal. The abscess contained about two ounces of purulent fluid. It appeared to have escaped from behind the longitudinal ligament into the retro-esophageal space at about the time of the greater obstruction of breathing, or about six weeks before death. The greatest projection of the tumor was opposite the third vertebra, where it was forced forward by the spine above the collapsed vertebral body against the trachea near its bifurcation. An abscess obstructing the respiratory passages in the upper cervical region could be reached and evacuated, but within the chest walls its diagnosis and treatment were not easy. The significance of what might be called asthmatic breathing as distinguished from the embarrassed respiration symptomatic of Pott's disease in this region should be borne in mind. If the abscess were large and could be percussed posteriorly, costo-transversectomy would be indicated. But in this case there was no dullness on percussion, and the small abscess lay at a distance of three inches from the exterior of the body, so that it was probable that the large opening of so-called posterior thoractomy would have been necessary, a justifiable operation if the difficulties of diagnosis could have been overcome.

Dr. Phelps recalled two cases in which the abscess had ruptured into the lung, but in neither did suffocation, which had caused death in Dr. Whitman's patient, occur. On the other hand, he had seen cases of cervical disease in which the abscesses had ruptured into the pharynx and caused suffocation. When the abscess was high enough it should be opened the very moment it was detected by an external incision, for it might rupture during sleep at any time, and, if the patient did not suffocate, he would die later of tuberculosis due to infection of the lung.

Dr. A. B. Judson said that the walls of the trachea were not easily compressible, except by force, as by the grasp of a strangler or the hangman's rope. When a foreign body in the gullet produced suffocation it was from spasm of the glottis and not from compression of the trachea. At the level of the third dorsal vertebra, however, the trachea occupied, together with the esophagus and the deep cardiac plexus of the sympathetic nerve, a narrow strait bounded behind by the vertebral bodies and in front by the upper piece of the sternum, and here, if at any point, its lumen might be diminished by the pressure of a fluctuating tumor. Above this level and below, where the anterior and posterior walls of the thorax diverged, no such pressure was likely to occur. It was not uncommon for abscesses, as in Dr. Whitman's patient, to occupy this critical position. The conservative tendency of cold abscesses to move where there was least resistance often perhaps prevented interference with the vital function of the trachea. He suggested that the fatal result might have been due to spasm of the glottis following the passage of a part of the contents of the abscess into the trachea or to some interference with the cardiac plexus.

Dr. Taylor was reminded of a case of Pott's disease reported by Dr. W. R. Townsend, in which the abscess was in this region. An unusual form of dyspnea was a feature of the clinical history, and the child died suddenly a few days after admission to the hospital. A rather small abscess which had not ruptured was found in front of the spinal column at the root of the neck. It was supposed that suffocation had been due to some traction upon the nerves rather than to pressure.

Dr. Myers recalled, and continued, the history of a boy, seven years of age, who was before the Section on March 18, 1898.*

The abscess had burrowed forward into the neck from the fifth dorsal vertebra and discharged behind the right sterno-mastoid. The

* *American Practitioner and News*, October 15, 1898.

evening temperature rose two degrees when the boy was allowed to be up, and was normal when he was kept recumbent, in which position the drainage was free. He had therefore been kept in bed for two months, after which his general health was entirely restored, and the sinus remained closed for several months. He had, however, returned with a profuse recurrence of the discharge, an enlargement of the post-cervical glands on the right side, and an abscess over the manubrium, but with no rise of temperature. An irrigating fluid passed from the old sinus out of the pharynx by a passage which was open for a month, but which had been closed for four weeks. It was a question whether one of the abscesses perforated, or whether one of the cervical glands ruptured and discharged.

Dr. Judson recalled a case in which, during the progress of purulent hip disease, an abscess over the manubrium turned out to be from caries at the junction of the upper and middle piece of the sternum. There was spontaneous rupture externally, consolidation, a scar attached to the bone, and recovery with angular deformity, anterior instead of posterior, as in Pott's disease. The angle formed by the manubrium and the gladiolus measured more than twenty-five degrees. The sinus had closed seventeen years ago. Recovery from the hip disease had been very favorable, and the caries of the sternum had left no inconvenience.

Dr. Homer Gibney said that it was reasonable to believe that abscesses occurred as often with disease of the upper dorsal region as of the cervical, but they were not so easily detected in the former, and were too often overlooked.

Dr. Whitman said that in the case reported by him the abscess had not ruptured, but was strictly confined to the retro-esophageal space in front of the spine. There had been no change in voice or difficulty in swallowing. An abscess in this region was a direct menace to life, the dangerous symptom being attacks of inspiratory dyspnea. It is probable that an operation would have saved life in this case.

Aluminium Corset. Dr. Phelps exhibited an aluminium corset for the treatment of spinal disease. He had experimented largely with various materials, such as sole leather, celluloid, wood, etc., and considered this material, which was light, clean, able to keep its shape and durable, as the best that he had found for the purpose.

Reviews and Bibliography.

Human Anatomy. A Complete, Systematic Treatise by Various Authors. Including a Special Section on Surgical and Topographical Anatomy. Edited by HENRY MORRIS, M. A. and M. B. (Lond.), Senior Surgeon to the Middlesex Hospital; Examiner in Surgery in the University of London, etc. Illustrated by seven hundred and ninety woodcuts, the greater part original and made especially for this work by special artists. Over 200 printed in colors. Second edition, revised and enlarged. 1274 pp. Price, \$6.00. Philadelphia: P. Blakiston's Son & Co. 1898.

Among the contributors to this work are the foremost anatomists of England. The list embraces the names of William Anderson, J. N. C. Davies Colley, R. Marcus Gunn, A. Jacobson, Henry Morris, J. Bland Sutton, Frederick Treves, W. J. Walsham, and Arthur Robinson, all teachers in the foremost English schools and anatomists of the widest reputation.

The work already so excellent in the first edition has in this been thoroughly revised, both in regard to the descriptive text and the illustrations. A description of the skin has been added, and an additional section at the end of the volume, on Vestigial and Abnormal Structures, has been supplied by Dr. Robinson.

It is a work of monumental character, and able to contest the field with the best treatise on anatomy yet produced. The student who does not fall in love with anatomy adorned with such beautiful illustrations and presented in such attractive dress of language as characterizes this work, had better give up medicine and return to the plow, the anvil, or the counter.

D. T. S.

Diseases of Women. A Manual of Gynecology. Designed Especially for the Use of Students and General Practitioners. By F. H. DAVENPORT, A. B., M. D., Assistant Professor in Gynecology, Harvard Medical School, etc. Third edition. Revised and enlarged. With 156 illustrations. 391 pp.

The author in the production of this book avows two main objects: In the first place, to give the student clearly, but with considerable detail, the elementary principles of the methods of examination and the simple forms of treatment of the most common diseases of the pelvic organs; and, in the second place, to help the busy general practitioner to understand and treat the gynecological cases which he meets with in the course of his every-day practice.

We must confess to have asked with the author what useful purpose a new work of the range of this can have, but after perusing it were convinced that a useful purpose has been accomplished, and that the author has succeeded in his aim. The call for a third edition is evidence that not a few others are of the same opinion.

D. T. S.

A Pocket Medical Dictionary. Giving the Pronunciation and Definition of the Principal Words Used in Medicine and the Collateral Sciences. Including very complete Tables of the Arteries, Muscles, Nerves, Bacteria, Bacilli, Micrococci, Spirilli, and Thermostatic Scales, and a Dose List of Drugs and their Preparations in both the English and Metric Systems of Weights and Measures. By GEORGE M. GOULD, A. M., M. D., author of the Illustrated Medical Dictionary, "The Student's Medical Dictionary," editor of the Philadelphia Medical Journal; President, 1893-1894, American Academy of Medicine. A new edition. Entirely rewritten and enlarged, including over 21,000 words. 530 pp. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1898.

The dictionary has ever been considered rather dry reading, and yet there is probably no shorter or better way of recalling knowledge once possessed and in danger of passing away or of gaining a full and just understanding of the language of any subject.

Few people can read enough to get the meanings of all the words they desire from the context or even meet with them often enough to become ready in their use. To all then running the eye over the dictionary every now and then proves most helpful. Again, a term and its meaning may be ours, but having to give attention in other directions, we find it slipping away, after a while to become almost useless, but coming across it occasionally while conning a suitable dictionary it comes back to us with all its associations.

The dictionary before us supplies just these needs for the physician, and in addition gives us the correct pronunciation. It goes out stamped with the authority of one who is a born lexicographer, and who is impressing his personality on the medical thought and teaching of the country in a way that few others approach.

In appearance it is a real gem of book-making.

D. T. S.

A Clinical Manual of Skin Diseases. With Special Reference to Diagnosis and Treatment. For the Use of Students and General Practitioners. By W. A. HARD-AWAY, A. M., M. D., Professor of Diseases of the Skin and Syphilis in the Missouri Medical College, St. Louis, etc. Second edition. Revised and enlarged. With 42 engravings and 2 plates. 557 pp. Philadelphia and New York: Lea Brothers & Co. 1898.

The aim avowed by the author in the preparation of this edition has been to make it a useful and trustworthy reference-book of the diseases of the skin, especially from the standpoint of diagnosis and treatment. The work is a creditable one, less than which could not be expected of the accomplished author. However, so much is addressed to the eye in the diagnosis of skin diseases, that a work is sadly handicapped that does not avail itself of the almost indispensable help of colored illustrations.

A city of half a million of inhabitants and great wealth should sustain and elevate the credit of its section in contributions to medicine. Of all cities of the southland, St. Louis ought to lead, notwithstanding the spirit of commercialism so deeply rooted there in the professional and journalistic field.

D. T. S.

Practical Diagnosis. The Use of Symptoms in the Diagnosis of Disease. Third edition, revised and enlarged. By HOBART AMORY HARE, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College of Philadelphia. Author of "Hare's Therapeutics," etc. Illustrated with 204 engravings and 13 colored Plates. 624 pp. Price, \$4.75. Philadelphia and New York: Lea Brothers & Co. 1898.

It is a pleasant task to review a book that does not need reviewing. The time has come when the works of Prof. Hare can travel on their name. The preface to the third edition will say all that needs be said: "The fact that three large editions of this book have been called for in two years indicates that it has found favor with practitioners of medicine. No less pleasant is the fact that an equal popularity has attended it in Great Britain. The text of this third edition has been carefully revised, and much new matter added. The endeavor has been to make this a companion volume to the seventh edition of the author's Text-book of Practical Therapeutics, which is published simultaneously."

D. T. S.

Materia Medica, Pharmacy, Pharmacology, and Therapeutics. By W. HALE WHITE, M. D., F. R. C. P., Physician to and Lecturer on Pharmacology and Therapeutics at Guy's Hospital, London, etc. Edited by REYNOLD WILCOX, M. A., M. D., LL. D., Professor of Medicine and Therapeutics at New York Post-Graduate Medical School, etc. Fourth American edition, thoroughly revised. 704 pp. Price, \$3.00. Philadelphia: P. Blakiston's Son & Co. 1898.

Throughout this work the effort has been made to include all the more important recent additions to knowledge in the departments to which the work relates. Antitoxins and preparations of animal tissue are briefly described, and the non-pharmacopeial drugs are placed in the body of the work along with drugs of similar action. It is a live book, condensed, it is true, but one in which every line tells. As a reference-book to refresh the memory on all important points it has no superior. It is representative of the highest authority and the most scrupulous care.

D. T. S.

Diseases of the Skin. An Outline of the Principles and Practice of Dermatology. By MALCOLM MORRIS, Surgeon to the Skin Department, St. Mary's Hospital, London, etc. With 10 colored plates and 26 engravings. New and revised edition. 589 pp. Philadelphia: Lea Brothers & Co.

The first edition of this work, which met with a flattering reception, having gone out of print, this second edition has been issued after thorough revision and the addition of a considerable amount of fresh matter.

In the section of the "Diseases of the Skin Due to Disorder of the Nervous System," the treatment has been given after the description of the several diseases.

The student may feel assured of finding in a small space a most happy description and the authoritative treatment of every important disease of the skin. The illustrations and the letter-press are especially attractive, a term almost superfluous applied to a Saunders publication.

D. T. S.

Foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The Vaccination Difficulty; The Control of Tuberculosis; Fracture of the Cervical Spine; The Study of Tropical Diseases; A New Polyclinic; Tubercle Bacillus and Milk.

The new vaccination act is considered to be a deplorable departure in our local legislation. About three years ago there was a severe epidemic of smallpox at Gloucester, which for some months paralyzed the trade of that city. The Board of Guardians of Gloucester have recently refused to appoint under the vaccination act of 1898 either the public vaccinators or the vaccination officers, or both. It, however, appears that it is open to the Local Government Board, under these circumstances, to apply to the High Court for a mandamus. Such an expedient had to be resorted to on one or two occasions in respect of Boards of Guardians who refused to prosecute defaulting parents in the days when the anti-vaccination bogey first made its appearance. Other Boards of Guardians who have not refused to appoint public vaccinators have offered such inadequate fees that they have been declined by the candidates. In these cases, however, the Local Government Board will act as arbitrator, and will fix the fees according to the circumstances of each district.

Sir Thomas Thorne Thorne, in his lecture on administrative measures for the control of tuberculosis, agreed with the central authority in refusing to approve the addition of phthisis to the list of notifiable diseases. He said the notification of phthisis in New York City was often held out as an example to be followed, but even the statistical results which were quoted in favor of the New York practice showed that the diminution in the phthisis death-rate was in full operation for years before the notification system was established. If the stringency of our laws as to infectious disease was made applicable to this malady, the system of inspection by sanitary officials would lead to publicity and to loss of employment, with the consequent deprivation of food and comforts which were essential to the cure of the disease in its incipient stages; it would hinder sufferers seeking medical advice at a time when this was most useful, and thus it would defeat the main object in view. The lecturer's conclusions did not, however, justify inaction as regards phthisis, which still caused 40,000 deaths every year in England and Wales. The lecturer appealed to all physicians, whether in hospital practice or in private, to give advice in some such sim-

ple form as was to be found in the leaflets now distributed to patients visiting some of the chest hospitals of the metropolis.

Miss Hamilton, M. D., who has been for three years physician to his Highness the Ameer at Kabul, has returned to London. Alluding to her work in affording medical aid to the people, she speaks of the appalling scourge of smallpox in the country and her efforts, with the warm support of the Ameer, to introduce vaccination. She had no "conscientious objectors" out there, where summary methods could be both effective and convincing.

At the recent meeting of the Pathological Society an interesting specimen of fracture of the cervical spine was shown. The original injury was due to a wall having fallen upon the man twenty years previous to his death. The patient was eighty-two years of age at the time of his decease, the accident having occurred in 1879, the neck being forcibly flexed. Upon being recovered from the debris he remained unconscious for two days, after which there was temporary loss of power of the right arm and leg. The treatment pursued was keeping the patient in bed for four months with his head fixed. There was a prominence at the back of the neck, the manubrium sterni and the larynx being unduly prominent, and the chin almost touching the sternum. A post-mortem examination showed that the cervical vertebræ were crushed together, the second, third, and fourth being at right angles to the lower three; but, strange to relate, the compression of the bodies together had shielded the spinal cord. The patient eventually died of senile decay.

The Secretary of State for the colonies has notified that in future selected candidates for the Colonial Medical Service will be required to attend at the School of Tropical Medicine which is being established at the Albert Docks branch of the Seamen's Hospital. The scope of the new school will be bacteriology at University College and clinical observation and research at the docks. Nurses who desire will be trained for tropical service as well as medical men. It has been pointed out that the diseases treated at the Albert Docks Hospital arrive from India, China, and other Eastern countries, and that their number and variety are much below those which are treated by the army doctors at Netley, consequently the colonial medical officers will be trained at a disadvantage with the officers of the Army Medical Service.

In the course of a few days another addition will be made to the medical institutions of London; it is to be called "The Polyclinic and Medical Graduate College." Its chief use is as an advanced school for medical men who wish to keep in touch with the progress of medical science, and it is to be maintained by the medical profession instead of by the public; at the same time it does not intend to enter into competition with the general hospitals. The most eminent specialists in all branches of medicine and surgery will be on the rota. Those able to pay will do so, but there will also be clinical demonstration rooms for the free treatment of poor patients,

along with apartments for practical classes, laboratories, reading-rooms, and a museum.

A correspondent to a newspaper has drawn attention to the extreme difficulty there is in London in getting a doctor's prescription made up between the hours of nine in the evening and eight in the morning. On one occasion having sent for a doctor at three A. M., and being in extreme need of the prescribed medicine, his servant had to visit no fewer than eighteen different chemists before any one would make up the prescription.

Shortly before his untimely decease, Professor Kanthack carried out a series of investigations as to the presence of the tubercle bacillus in sixteen different milk supplies in Cambridge; as a result he discovered that more than half the samples tested — nine out of sixteen — were infective, while of ninety guinea-pigs inoculated in the course of the experiments, no less than twenty-three developed tuberculosis. The Professor not only used the centrifugalized sediment from the milk, but also the cream; he concluded that it is impossible to disentangle tubercle bacilli from fat globules by centrifugalization alone.

The authorities at Liverpool have protested against the action of the Local Government Board in closing the public vaccination stations in that city, and draw attention to the fact that so far only seven conscientious objectors to vaccination have come forward in the whole of Liverpool.

LONDON, January, 1899.

A CURIOUS POCKET PIECE.—In the New York Medical Journal of February 4, 1899, Dr. William S. Gottheil describes a case in which a woman carried a piece of her own skull in her pocket for years "for good luck." She applied for treatment for a different affection, and it was discovered incidentally that a syphilitic periostitis had begun again around the scar left by the ulceration from which her piece of bone had come twelve years before. As in the present case, she had not at that time attached sufficient importance to the matter to consult a physician about it. The sequestrum, of which she was quite proud, was an ovoid piece of bone measuring two and a fourth by two inches, and was composed of two adjacent portions of the two parietal bones, the sagittal suture in the middle showing beautifully. Its upper convex surface showed the outer table of the skull intact. The under concave surface was composed mostly of cancellous tissue; but all along the middle line, at the suture, the inner table was present, showing that at that place the entire thickness of the skull had been lost.

Apart from its curiosity, the case is of interest as showing the very extensive destruction of important organs that can take place in syphilis without systemic reaction or much personal inconvenience. The entire thickness of the skull had been destroyed, and the meninges necessarily exposed; yet the inflammation had not spread to those membranes, and the patient had hardly considered herself sick.

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MEASUREMENTS OF PAIN.

Some four or five years ago Arthur MacDonald, of the United States Bureau of Education, made a physiological new departure by measuring pain, the results of which were at the time reported.

Recently the author presented a paper before the American Psychological Association in which he adds many new experiments to those previously reported. In the newer experiments the observer used an instrument of precision which he calls a temple algometer. It is his own invention.

"The instrument is pressed against the temple of the subject until a disagreeable sensation is aroused, the amount of pressure being registered on a scale arranged for the purpose. With this instrument, which is one of great delicacy, Mr. MacDonald claims to be able to approximate very nearly to what he calls the 'threshold of pain.' In each case the least sensibility to pain was noted. His experiments extended over a great variety of social conditions and ages, including in all eight hundred and ninety-nine persons. Of these some were public school girls, others private school girls, boys in public schools, university women, washerwomen, business women, and self-educated women."

His conclusions in detail are given by the Boston Medical and Surgical Journal, from which we quote. They are significant, though not covering so many cases as is desirable for statistical study:

(1) In general the sensibility to pain decreases as age increases. The left temple is more sensitive than the right. This accords with former experiments that the left hand is more sensitive to pain than the right hand. There is an increase of obtuseness to pain from ages ten to eleven; then a decrease from eleven to twelve; then an increase from twelve to thirteen. From thirteen to seventeen, while the right temple increases in obtuseness, the left temple increases in acuteness. This is in the post-pubertal period. There is a general variation, which experiments on larger numbers might modify.

(2) Girls in private schools, who are generally of wealthy parents, are much more sensitive to pain than girls in the public schools. It would appear that refinements and luxuries tend to increase sensitiveness to pain. The hardihood which the great majority must experience seems advantageous. This also accords with our previous measurements, that the non-laboring classes are more sensitive to pain than the laboring classes.*

(3) University women are more sensitive than washerwomen but less sensitive than business women. There seems to be no necessary relation between intellectual development and pain sensitiveness. Obtuseness to pain seems to be due more to hardihood in early life.

(4) Self-educated women who are not trained in universities are more sensitive than business women. Giving, then, the divisions in the order of their acuteness to the sense of pain, they would stand as follows: 1st, girls of the wealthy classes; 2d, self-educated women; 3d, business women; 4th, university women; 5th, washerwomen. The greater sensitiveness of self-educated women as compared with university women may be due to the overtaking of the nervous system of the former in their unequal struggle after knowledge.

(5) The girls in the public schools are more sensitive at all ages than the boys. This agrees with the results of our previous measurements that women are more sensitive to pain than men.

These measurements of least disagreeableness, or of threshold of pain, are approximate measurements of the combination of nerve, feeling, and idea.

Such experiments are of great physiological interest, and open a new field for the study of sensation on mathematical principles according to *Weber's* or *Fechner's* law, which is that "sensations increase as the logarithm of the stimuli." The bad boy who gets a spanking at school is aware of the fact, but as the stick is not an instrument of precision, neither he nor his teacher could calculate the results by logarithm, rule, or law.

The bearing of the experiments upon practical medicine is evident, and will doubtless prove of value in the diagnosis, prognosis, and treatment of the painful neuroses.

* By "laboring classes" are meant artisans and unskilled laborers; by "non-laboring classes," professional and mercantile men.

Notes and Queries.

MILK-SUPPLY AND TUBERCULOSIS: THE INFECTIVITY OF CREAM.—

We printed last week a paper in which will be found recorded the results obtained by the late Professor Kanthack and Dr. Sladen in their investigations as to the presence of the tubercle bacillus in sixteen different milk-supplies in Cambridge. The methods which they employed are given in detail, and are clearly of so thorough a character as to leave no room for reasonable doubt as to the accuracy of their results. There can be no question that animal inoculation carried out with due precautions and controlled by microscopic observations constitutes the most delicate test at our disposal for the detection of the tubercle bacillus, whether in milk or elsewhere. This test was lavishly employed, no less than 6 guinea-pigs having been inoculated from each milk-supply; the results show that this number was by no means unnecessarily large, for in two instances out of the 9 in which a positive result was obtained, only 1 of the 6 animals inoculated became tuberculous. The facts elicited by Professor Kanthack and Dr. Sladen are indeed striking and, we may almost add, appalling. More than half the supplies tested—9 out of 16—proved infective, while of the 90 guinea-pigs inoculated in the course of the experiments, no less than 23 (25.55 per cent) developed tuberculosis. These results are considerably in excess of those recored by Delépine in his recent lecture on the subject, and it is of interest to consider what may be the possible reasons for such unusually high figure. It is possible that bovine tuberculosis is abnormally prevalent in the districts around Cambridge, though we have not any statistics to support this opinion. It is probable, again, that the extremely searching character of the animal experiments is in part responsible for the high percentage of tuberculous milk found. But it is also possible—and this is a point which, in our opinion, is of very great importance—that the employment for inoculation not only of the centrifugalized sediment from the milk, but also of the cream, has had a definite bearing on the results. There is an opinion prevalent in some quarters that the danger of conveyance of tuberculosis by cream is slight as compared with milk. These experiments point in exactly the opposite direction. Three times out of the nine cases in which a positive result was obtained did the cream produce tuberculosis when the sediment failed to do so, and in no single case was the sediment infective when the cream was not equally or more so. We are not aware that this point—clearly one of the first importance—has ever been distinctly brought out before. It is evidently impossible to disentangle tubercle bacilli from fat globules by mere centrifugalization. The importance of the part played by milk in the dissemination of tubercle,

especially in children, is well enough established. But it is researches like these which drive the facts home into the public conscience, and we heartily wish that more experimental work of this thorough type were forthcoming to emphasize and to elucidate the dangers which attend the consumption of tuberculous milk.—*Lancet*.

CONGENITAL DEFECT OF THE FIBULA.—F. J. Cotton and A. L. Chute (Boston Med. and Surg. Journ., August 25th and September 1st, 1898,) describe three cases of congenital defect of the fibula and one of partial fusion of tibia and fibula, with a congenital constriction round the leg. In the three former cases there was absence of one or more toes; in one only was the fibula completely absent; in the other two it was present in a rudimentary form. These details were discovered by means of the *x*-rays. In the case of fusion of the leg bones there was no ossification of the foot. The authors accept the amniotic theory as the most plausible yet advanced. Between the fifth and eighth week, pressure of a too tightly fitting amnion interferes with the development of the exposed fibula and the outer toe or toes of the exposed foot. Lack of space determines the bend of the growing tibia; the adhesion which produces the so-called scar is a result of contact of the most salient point of the tibia with the enveloping wall. Early pressure and disuse produce deficient vessels and nerves, and so lead to the lack of growth of the whole limb. Where there is a rudiment of the fibula of some size, but situated higher up than normal, an operation aiming to slide this down and fix it to the tibia as an external malleolus might be worth considering. Amputation is to be thought of only in cases utterly unsuitable for other treatment.—*British Medical Journal*.

A HEMORRHAGIC MICRO-ORGANISM.—C. Klein (*Centralblatt für Bakteriologie und Parasitenkunde*, xxii, 4; *Centralblatt für innere Medizin*, November 5, 1898), after alluding to the bestowal by the laity of a common name on various diseases of sheep, speaks of one of those diseases as being manifested by hemorrhagic edematous swelling of the groins and of the abdominal wall, proceeding from the vulva, in sheep that have recently dropped lambs, proving fatal in from twenty-four to ninety-eight hours. In the skinning of these animals three persons acquired a vesicular affection of the skin which seemed to have many points of similarity to the carbuncular manifestations of anthrax. The fluid contained in the vesicles had a bloody color. Besides the vesicles there were observed in the human subject only erythema, swelling of the axillary glands, and local itching and irritation, but without any elevation of temperature. From the contents of the vesicles the author obtained by cultivation a staphylococcus-like micro-organism into the behavior of which on various media, together with its staining reactions, he goes largely, particularly as to the points that distinguish it from the micrococcus found by Nocard in cases of the gangrenous mastitis of sheep.

Clinically the two organisms are chiefly distinguished from each other in their effects by the fact that Nocard's micrococcus gives rise only to transitory boils, while the micro-organism found by the author always occasions extensive hemorrhagic edema of the subcutaneous tissue and of the muscles. In several instances, also, hemorrhagic enteritis and, especially after intra-peritoneal injection, hemorrhagic peritonitis have been observed. The small size of the liver is striking. The infection is almost always fatal. Immunization is possible by the employment of preliminary inoculations with highly attenuated culture products, but the immunization is not perfect, for the subsequent inoculation of large quantities of the unattenuated product still gives rise to the disease, although its development is postponed.

In two instances Klein has inoculated sheep with his micro-organism. One of the animals died, and the other recovered after having for a long time shown severe illness with a temperature of 106° F. From the sheep that died there was obtained a micro-organism that displayed the greatest virulence when inoculated into guinea-pigs.—*New York Medical Journal*.

SALOPHENE.—M. Cresle (*Gazette hebdomadaire de medecine et de chirurgie*, December 18, 1893), in a thesis before the faculty of Toulouse, considers salophene as now definitely settled in the therapeutic domain. It exerts, he says, an incontestable action upon acute and sub-acute rheumatism, but its effects are less constant than those of salicylate of sodium. In chronic and blennorrhagic rheumatism it has not shown itself superior to other drugs. Salophene possesses a powerful analgetic action, which is exercised even in those cases where this drug can not be looked for to effect a cure. It has given good results in migraine, in various neuralgias, and in sciatica. Salophene employed in a medium dose produces no phenomena of intolerance, nor does it occasion headache, buzzing in the ears, or troubles of visions, but tolerance appears to be rapidly induced. In certain cutaneous affections salophene appears to have some efficacy, but it is necessary to wait for further experience. The medium dose of salophene is sixty grains daily, more or less, according to the gravity of the complaint.—*Ibid*.

CALCULUS OF THE UVULA.—In the Boston Medical and Surgical Journal of Dec. 8th, Dr. J. L. Goodall has published the following case which he claims as unique: A colored female infant, aged two months, suffered since birth from dyspnea. In the upright position respiration was performed normally through the nose, but in the recumbent position there was considerable obstruction to nasal breathing. On the anterior aspect of the uvula, midway between the tip and the junction with the soft palate, was a white globular mass about four millimeters in diameter, lying apparently immediately beneath the epithelium. The probe showed it to be of bony hardness. It was readily enucleated by a cutting forceps. Under a press-

ure of 3 lbs. it broke into yellowish-white fragments. Microscopically they consisted of amorphous particles, fat crystals, fat drops, and degenerated epithelium. A week after removal the wound had healed and respiration was freer. Probably the mass originated in a mucous gland, and the weight in the recumbent position occluded the naso-pharynx. Though no case of calculus of the uvula has been recorded, three cases of calculus of the soft palate have. A boy, aged sixteen years, had dysphagia and dyspnea. Two masses were found on the soft palate, one on either side of the uvula, and of about the size of a hazel-nut, which on probing through the dilated mouths of the palatine glands were found to be calcareous. A tampon saturated in dilute sulphuric acid dissipated them. Mr. C. A. Parker, at a meeting of the Laryngological Society of London on Dec. 13, 1893, reported the case of a young man, aged twenty-nine years, who complained of great soreness in the throat for six or eight months. A calculus was situated in the substance of the soft palate just to the right of the base of the uvula, a portion lying free and resembling a sloughing ulcer. It was removed from what was apparently a cul-de-sac between the muscular layers, and when dry it weighed 54 grains. It was composed of epithelial debris, spores and mycelium of *gladotrix*, and earthy salts.—*Lancet*.

CONVICTION OF A CHRISTIAN SCIENTIST.—We learn from the *Cleveland Journal of Medicine* for January that Harriet O. Evans, a "Christian Scientist" of Cincinnati, complacently allowed Thomas McDowell to die of typhoid fever without any treatment except the much-vaunted prayer of these peculiar people. Under the energetic initiative of Dr. Charles A. L. Reed, of Cincinnati, who is a member of the State Board, she was prosecuted for practicing medicine without a license. The police-court jury is reported to have employed just twenty minutes in deciding that she was guilty as charged. The case has been appealed, of course, but it is a most excellent beginning. The thanks of the medical profession of the State, says the *Cleveland Journal*, are due to Dr. Reed for having shown in this and many other cases what a sincere and energetic member of the board can accomplish.—*New York Medical Journal*.

AN UNDESCRIBED FORM OF OSTEOPATHY OF THE LOWER EXTREMITIES.—At the meeting of the *Société Médicale des Hôpitaux* on Nov. 18, 1898, Dr. E. Hirtz presented a man, aged thirty-seven years, who at the end of 1893 had shooting pains in the legs and knees, of greatest intensity in the left ankle. There was also a little periarticular swelling but no deformity. The feet also became affected. He was treated in hospital during six weeks for rheumatism, and was cured and resumed his occupation of salesman, which obliged him to constantly stand. In January, 1894, the swelling reappeared in the same places. In March deformity first became evident; it consisted at first of enlargement of the internal part of the left ankle-joint with weakening of the plantar arch. After a month the right

foot was similarly affected. The pain was great, and in June he again entered the hospital. Under treatment the enlargement subsided somewhat, and he was able to resume his occupation. But the pains and deformity increased. Pressure corns formed on the soles, terminating in perforating ulcers. He entered the hospital a third time. In October the left lower limb was much magnified, the thigh was enlarged in its lower third, the leg and foot were still more enlarged, and the internal malleolus was enormous. Palpation showed that the enlargement was principally osseous; it involved the lower half of the femur, the tibia in an increasing degree from above down, and the fibula, which was double its normal dimensions. The foot was converted into a veritable block of bone in which individual bones could not be distinguished. The right lower limb was affected in a much less degree than the left. No other bones were involved; the signs of Paget's disease and of acromegaly were absent. The case resembled one brought before the society in 1892 by Marie under the name of "systematized osteopathy of a type not described." But the latter differed from Dr. Hirtz's case in that the radii and inferior maxilla were affected. There were no signs of syphilis or of locomotor ataxia.—*Lancet*.

GLYCERINATED LYMPH.—The following minute has been issued by Mr. Henry Chaplin, President of the Local Government Board, London:

Local Government Board, Nov. 16, 1898.

I desire to place on record an expression of the value which I attach to the labors and researches of Dr. Sydney Monckton Copeman in connection with the preparation, by the aid of an aqueous solution of glycerine, of a vaccine lymph which is free from harmful organisms. An indication of the value which is attached to Dr. Copeman's researches is to be found in the fact that Parliament has decided by Statute that this form of lymph shall for the future be used in this country.

HENRY CHAPLIN.

We are glad to be able to offer our congratulations as well to Dr. Copeman with regard to his arduous researches into the question of glycerinated lymph, though of course the idea of using glycerine as a vehicle did not originate with him. But we think it is fair to say that he has raised what was formerly a mere hypothesis in this country into the region of ascertained fact. By the use of properly prepared and standardized glycerinated lymph the last shred of objection which any objector other than a pig-headed fanatic can possibly put forward to vaccination has been done away with, and we can only hope that the "tremendous experiment" upon which the Government has entered may not be attended with disaster. If an epidemic of smallpox should come, it will fall hardest upon innocent children, who will owe disfigurement and possibly death to the mistaken action of those whose first duty it should have been to guard them against such misfortunes.—*Ibid*.

Special Notices.

A VERY GRAVE ERROR.—The experience of many of the best men of the profession, not only of the United States but abroad, has established the clinical value of antikamnia. Among those who have paid high tributes to its value and who occupy positions of great eminence, may be mentioned Dr. J. Acheson Wilkin and Dr. R. J. Blackham, practitioners of London. They have found it of value in the neuralgias and nervous headaches, resulting from over work and prolonged mental strain, paroxysmal attacks of sciatica, brow-ague, painful menstruation, lagrippe and allied conditions. Indeed, the practitioner who has such cases as the latter come under his observation, who attempts their relief by opiates and stronger drugs, when so efficient an agent can be used, which is much less harmful, commits a grave error.

Experience goes to prove that ten-grain doses of antikamnia in an ounce of sherry wine, taken every two to four hours, will carry the patient through these painful periods with great satisfaction—*Medical Reprints, London, England.*

GEO. W. SAMUEL, M. D., Nashville, Tenn., says: I had a case of a man who had been drinking heavily for several days. I prescribed Celerina in tablespoonful doses, every three hours, and in a short time he was in good shape again. I also used it in a case of neuralgia, in the following formula:

R Celerina, ... 8 ounces.

Quinia Sulph, ... 60 grains.

M. Sig. Teaspoonful every four hours.

It acted like a charm. In a case of impotency, I used calomel in connection with Celerina, and the patient reports every thing standing all right.

SANMETTO IN GENERAL NASO-PHARYNGEAL AND BRONCHIAL CATARRH COMPLICATED WITH GASTRO-INTESTINAL CATARRH—ALSO IN HYPERTROPHY OF PROSTATE, DYSURIA, AND PAINFUL MICTURITION.—I have used Sanmetto in my own case, that is, general naso-pharyngeal and bronchial catarrh with the invariable complication in all such cases, gastro-intestinal catarrh, with the very best results, and I frequently prescribe it in such cases with the most satisfactory results. I use it in all cases of hypertrophy of the prostate, dysuria, difficult and painful micturition, and such as need to have the genital tract braced up, with the very best results.

Bedford, Ind.

J. B. DUNCAN, M. D.

W. IRVING HYSLOP, M. D., 4408 Chestnut Street, West Philadelphia, Pa., says: I have used Celerina quite largely both in private and hospital practice, and with gratifying results. It is void of repugnant taste, and is readily retained by the stomach. My experience with Celerina has been confined chiefly to its use in nervous diseases, particularly loss of nerve power, and the opium habit, in which conditions it has served me well, and I shall continue to prescribe it both in private and hospital practice.

WILLIAM R. WARNER & Co.'s salesroom, offices, and storerooms at No. 1228 Market Street, Philadelphia, were entirely destroyed by fire on the night of February 16th, but they announce to the trade that their laboratories are running day and night, and all orders will be filled with as little delay as possible from the laboratories, Broad and Wallace Streets. Their Chicago branch, however, has a large stock on hand, and are prepared to fill all orders promptly that may be sent them.

MALNUTRITION.—"I am sure the Imperial Granum Food was an efficient agent in restoring the health of a baby boy recently under my care. He was suffering from malnutrition with a most persistent diarrhea. Many foods were tried and discarded, and I was beginning to lose heart, when I happened to think of the Imperial Granum. Its use proved it to be very easily assimilated, and I think it saved the baby's life."

—, M. D.

THE AMERICAN PRACTITIONER AND NEWS.

"*NEC TENUI PENNA.*"

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No. 5

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—*RUSKIN.*

Original Articles.

SOME POST-OPERATIVE EFFECTS OF ABDOMINAL SURGERY VIEWED FROM A MEDICAL STANDPOINT.*

BY THOMAS HUNT STUCKY, A. M., M. D.

My desire in discussing the above subject is to cast no reflection upon the brilliancy of the work in this especial field, nor to decide the character, condition, or circumstances requiring surgical interferences, but to mention some of the after-effects observed in my own practice, after the patient has passed from surgical observation as cured.

The results as observed may be divided as follows:

Mechanical . . .	{ Adhesions.	{ Digestive.
	{ Constipation.	{ Respiratory.
Nervous	{ Neurasthenia.	{ Mental.
	{ Monomania.	{ Manifestations.

I regret exceedingly I am unable at this time to find a better name for the first division, being forced to believe in the vast majority of cases when the peritoneum in its normal relation is disturbed adhesions result, the degree or extent of the adhesions not depending on the amount of surgical interference.

In nine cases operated upon five years ago (the operation being one ovary in four and both in five), four have died since. Upon three, autopsies were held.

CASE I. Mrs. L., aged twenty-eight. Operated upon January 3, 1893. Both ovaries and tubes removed; passed from surgeon's observation after two months cured. Remained improved several months.

*Read before the Louisville Medico-Chirurgical Society, February 10, 1899. For discussion see p. 178.

Pains in abdomen, first transient, then more continuous, growing more severe and continuous; constipation persistent, digestion poor, loss of flesh, evidences of strangulation. Surgeon recalled; advised re-opening abdomen, which was done July 6, 1894. Adhesions everywhere, with bands binding so tightly portion of small intestine as to produce gangrenous spots. Patient died July 8, 1898.

CASE. 2. Mrs. T., aged forty-five. Both ovaries removed for some cystic trouble. Had prior to operation always been cheerful and happy in disposition. Fond of family and home. Digestion good. An ideal case from which an excellent result was to be expected. One year after operation depression of spirits, moroseness, fault-finding, generally disagreeable, digestion becoming impaired; bowels constipated, constipation increasing; pain at seat of ovaries. Notwithstanding treatment, the patient died four years afterward with symptoms of strangulation. Operation advised but refused.

Autopsy revealed constriction of sigmoid flexure. The autopsy on the third case revealed similar condition of bands of adhesion, death undoubtedly taking place from exhaustion.

Of the living cases operated upon during that year, three are markedly neurasthenic, with digestive disturbances; one manifesting at the time of the period hysteria, lasting for three days. This patient, aged thirty-eight, both ovaries removed, has missed the past three hysterical attacks, due, I believe, to the administration of ovarian extract.

Another has an attack of asthma, not having missed but one since the operation in October, 1893, and, notwithstanding treatment, continues to have the attacks.

In the past four years there appears to be a lessening of the intestinal symptoms, due perhaps to the increased skill in manipulation and less handling of abdominal contents, preventing thereby local injury to parts.

Whether the nervous symptoms found differ radically from those produced in any condition of slow poisoning is most difficult to determine. Or whether the neurasthenic conditions produced from prematurely induced menopause differs materially from operations on bladder or prostate in the male, if we accept the comparisons made by Dr. Moyer, in the *Journal* of October 10, 1898, there is no difference.

Quoting from his paper: "The first question which naturally presents itself is this: Is there any difference between operations upon the pelvic organs of women and operations in general? If you examine

the statistics you will be at once struck with the number of cases which are operated upon for pelvic disease, which show insanity, neurasthenia, and other nervous troubles following operation and probably resulting from it. Some writers have come to the conclusion that these operations are peculiarly liable to be followed by such phenomena; but if you come to analyze the cases more closely you will find that operations are performed upon persons whose general health is greatly impaired.

"The great majority of them are very much reduced by a long history of illness prior to the operation. The operations in themselves are many times prolonged, and a by no means infrequent condition is the one of infection, a slow poisoning of the system for which the operation was undertaken. Those necessarily are apart from the operation itself, and they furnish a fruitful soil upon which nervous troubles and insanity are built. In order to get some sort of basis for comparison, I have taken fifty cases of operations upon the prostate and bladder. I have thought there might be some comparable relation between the pelvic organs in the male and in the female. The operation was on the same part of the body, and frequently accompanied by ill-health, and often in the male by infection. I compared fifty cases, excluding all those in which there was marked disease of the kidney, and I found that the mental and nervous effects following operations which might be attributed to the operation *per se* were much greater in the male than in the female. Taking all factors into consideration, operations upon the female pelvic organs are not attended with more nervous disturbance, such as neurasthenia or insanity, than are the operations in general surgery.

"The character of the mental disturbance which may follow operations is substantially the same, whether the operations are done upon the pelvic organs or upon other parts of the body. The great bulk of them fall within the class of neurasthenia, or that condition which is described by alienists as primary confusional insanity. These two conditions seem to be the great predominating mental and nervous states which follow operations.

"In conclusion, therefore, I would simply say that I have arrived at the opinion that there are no radical differences in the primary effects of operations upon the pelvic organs in men differing from the effects of similar operations in women, or indeed of operations in general surgery, and that there is a distinct and peculiar effect from the removal of the ovaries or tubes, or both, by which the menopause is established,

but that does not differ in its nervous phenomena from the menopause occurring normally at the ordinary time of life. As to the possibility of a peculiar physiologic effect following extirpation of the ovary, not attributable to the menopause, I have absolutely no conclusion to offer."

Dr. Joseph Price writes regarding nervous phenomena following operations, "I am perfectly willing to admit that we have had too many post-operative sequelæ and too many local lesions following our operations; the materials were badly chosen, and are yet in many cases."

Dr. Price seems to attribute much of the ill-success to carelessness upon the part of the operator, the operations being done with badly prepared materials, and as a result all sorts of local pain and nervous disturbances are going to result. If this be true, and it seems to be supported by our leading gynecologists, then much of the evil rests upon the surgeon himself. Then may it not be in the anxiety of the operator to impress upon his patient the fact no further treatment is necessary, that the successfulness of the operation is an assurance of recovery?

Failing, as has been my observation, to consider the great moral shock in breaking the chain of performance of function, that the digestive and eliminative systems have been interfered with, if not arrested. There is a necessity for moral support as well as physical. Competition is always brisk, and especially so among the knights of the scalpel.

I do not wish to be understood as meaning there are no cures from removal of diseased organs; far from it. Most strenuously have I advocated the removal of all pathological conditions of the pelvis when admissible, but I do believe many post-operative evil effects we now meet are due to removal of parts physiological, negligence on the part of the operator as to material, cleanliness, and selection of patients. The practitioner meets these cases in their little ailments, whether they be neurotic or lithemic, and it is he to toy with their moods and discomforts. Deducting from a limited experience of seventy-six of whom I have a record:

First: There are nervous cases which seem to originate reflexly from pelvic affections which are not relieved by removing the uterus or its appendages.

Second: Often these cases after operation prove more obstinate to treatment, due probably to absence of ovarian function.

Third: The operation often breaks the harmony of the essential organs and disturbs nutrition, which are two of the most common factors in causing the condition called neurasthenia.

Fourth: The operation for removal should be performed in pathological conditions only.

LOUISVILLE.

SUPRAPUBIC CYSTOTOMY FOR DISEASE OF THE PROSTATE.

BY J. E. KEMPF, M. D.

Introduction. Suprapubic cystotomy was first performed by Peter Franco in the second half of the sixteenth century. Since then it has been frequently performed for stone or foreign bodies in the bladder and for cystitis, but only during the last few years has the operation come into use for the relief of the complications of enlarged prostate gland. It is safe to say that what tracheotomy is to the choking patient, suprapubic cystotomy is to the old man suffering from the complications liable to arise in hypertrophy of the prostate gland.

Pathology of Enlarged Prostate. During the latter years of adult male life the prostate gland is frequently enlarged by the growth of the glandular and the muscular parts of the gland, the enlargement being adenomyomatous. The adenomatous tissue predominates in the soft tumor, while in the hard variety the myomatous tissue of the gland is excessively enlarged. The hypertrophy of the prostate gland, either hard or soft, may be general, that is, the whole gland may be enlarged, or it may be an irregular enlargement of the entire gland, or any one of the three lobes, either lateral one or the middle lobe may be hypertrophied.

The enlargement of the prostate gland bulges upward and toward the front bladder wall, causing the inner opening of the urethral canal to be prolonged upward and toward the front of the bladder. Behind the prostatic enlargement the bladder forms a sac, which always contains urine, especially when the patient is in a reclining position at night. This produces the desire to urinate, which rarely leaves the patient entirely. The prostatic part of the urethral canal is always lengthened from two to three inches, and a greater curvature of the back wall of the urethral canal is produced. This makes it necessary that in catheterization we make use of a metallic catheter with a greater

curve than the ordinary catheter, or that we use the soft rubber catheter, which worms its way through the canal on gentle pressure.

Etiology of Hypertrophy of the Prostate. Age can not be said to be a cause, because more than twice as many adult males over fifty years of age have atrophy of the prostate gland rather than hypertrophy. About one third of all adult males over sixty years of age are afflicted with hypertrophy of the prostatic gland, and only about one half of them are ever caused any trouble, consisting of a mechanical disability to empty the bladder.

Symptoms of Hypertrophy. The patient afflicted with hypertrophied prostate first notices that he has to urinate more frequently, especially at night. The next symptom he may notice is a dripping of the urine, or an involuntary passage of urine. Sometimes dysuria is the first and most painful symptom. Either the patient can not pass his urine at all or only in small quantities at a time, as much as a tablespoonful or less every ten or fifteen minutes. Later on there may occur incontinence of the urine. Cystitis or septic trouble may complicate the case, and may generally be traced to unclean catheterization.

Diagnosis. The diagnosis of hypertrophied prostate is generally made positive by a rectal examination with the finger, and the tumor is thus easily palpated. An examination should also be made by means of a catheter, and the urine should also be examined. A cystoscopic examination is also indicated if the doctor is fixed to make it.

Prognosis. Every case is a law unto itself. A cure of prostatic hypertrophy need not be sought after, as it is not probable, except, perhaps, in the hands of the most expert operator. But on the other hand, palliative treatment promises much.

Treatment. Hygienic treatment may consist of directions to the patient to guard against cold and wet feet, and to guard against draughts, and to keep from catching cold. The patient has to get up at night frequently, and he should be warned against walking on a cold floor with bare feet. He should wear woollen underclothing next to the skin, and regulate his life so as to eat his principal meal at noon, to eat an early supper, and not to retire until two hours after supper. The diet should be regulated, salty, peppery, and spicy foods being forbidden, especially mustards, pickles, pork, salt fish, beer, wine, and champagne.

The only medical treatment that can prove of any benefit is such as would be indicated by the symptoms in the case. Flaxseed tea

hyoscyamus and opium, acetate of potash, buchu, pichi, juniper, etc., are remedies frequently called for. Iodide of potash, it is supposed, has in some cases lessened the enlargement. How true this is I can not say, as I have never seen any benefit from its use.

The use of the catheter promises much if properly done. If the case is of such a nature that the patient can use the catheter himself, it is best *always* to use the soft catheter. The patient, if he wishes and if it is convenient to do so, can train himself in self-use, and it is astonishing how expert some of them get, and how much their urethral canals will stand after they once become habituated to the use of the catheter.

The metallic catheter with the greater curve, or the so-called prostatic catheter, should only be used by the doctor. Strict cleanliness so as to prevent cystitis and sepsis must always be insisted on. Wash the catheter with soap and water before and after using, immerse it in a formaldehyde solution, and then rinse it in hot water just before using. Always wash the hands carefully, and also the head of the penis.

In using the catheter, have the patient to lie on the bed with an elevated pelvis; use the catheter skillfully; empty the bladder slowly and carefully. If the bladder was very full, do not empty it completely the first time. If, however, the urine is bloody and thick, remove all of it, and inject the bladder full with a boric acid solution, which repeat until the water comes away clear.

In cases where the taking away of the urine with the catheter becomes impossible, there remains suprapubic aspiration, or suprapubic cystotomy.

Operative Treatment. Castration as a cure for hypertrophy of the prostate need not require our attention, as it has already passed into merited disuse.

The electric treatment of the disease is a complicated affair, because machinery is necessary that most doctors have not, and if they had it, they would not know how to use it. Bottini with the galvano-caustic prostatome claims to have had great success. But the electric treatment of this trouble will for some time remain in the hands of specialists.

The operations of prostatotomy and prostatectomy, rectal, endourethral, suprapubic, or perineal, are as yet in the experimental stage, and are performed mainly by skillful surgeons especially trained for the work.

The operation of suprapubic prostatectomy, where the middle lobe of the prostate gland alone is hypertrophied, a rare occurrence, however, is an operation that is very successful, but only in such cases.

Suprapubic cystotomy is an operation that the most ordinary surgeon can perform, and is the operation for the various complications that may occur in cases of hypertrophy of the prostate, such as unusual difficulty in introducing the catheter, or impossibility to introduce it, or septic cystitis, or hemorrhage in the bladder, or of false passages in the urethral canal, or malignant tumors in or near the bladder, or disease of the kidneys, or where hypertrophy of the prostate occurs with some other incurable systemic disease.

The object of the operation is to obtain a fistula in the bladder in the linea alba immediately above the symphysis pubis. Mode of performing the operation may be divided into three steps: First, preparatory; second, the operation, and third, the after-treatment.

Preparatory. If possible precede the operation by giving the patient a general bath. This, however, may depend on the complications of the disease of the prostate necessitating the operation, and no doubt must frequently be dispensed with. But the rectum should always be emptied by an enema, and the bladder, if the use of a catheter is possible, should be emptied, and then refilled with a four-per-cent solution of boric acid. A full bladder is generally necessary, and if the use of the catheter is impossible, the bladder is probably full to distension.

The pubis must be shaved, and the entire abdomen and the thighs must be scrubbed and washed with soap and water, then cleansed with alcohol, and lastly disinfected with corrosive sublimate solution, one to two thousand. Then give an anesthetic. I prefer chloroform.

The Trendelenburg position is the best, but need not be extreme; a raising of the pelvis by means of pillows may be sufficient in an emergency.

Thorough sterilization of the necessary instruments is necessary, and gauze, sterilized water, cotton, etc., should be provided by the surgeon or his assistants.

The Operation. The cut is made immediately above the symphysis pubis upward six to eight cm. Skin, linea alba, and transverse fascia are held apart by means of blunt hooks, and, either with the finger or the blunt end of the scalpel, the way is easily made clear to the distended bladder, and the bladder wall is fixed by means of two sutures entered about one cm. from the median line on each side.

This gives the operator control of the bladder, and by means of the two sutures the bladder wall is drawn out even with the skin, and with a narrow scalpel an incision is made between the two sutures into the bladder wall about one and a half to two cm. long. The contents of the bladder now flow away, and if necessary an examination may be made of the bladder by the finger of the operator.

The next step is to introduce the catheter, which has a T shape, Fig. 1, and which is easily made of a soft rubber catheter. It is self-retaining, does not hurt the bladder, and may remain in the bladder until the fistula has formed, which is about two weeks.

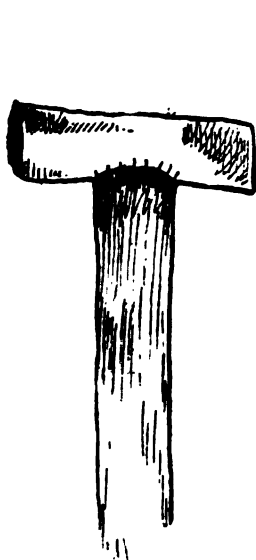


FIG. 1.

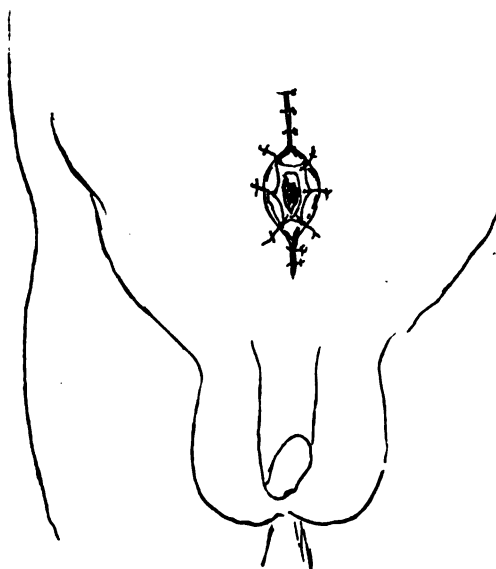


FIG. 2.

The margins of the bladder wound and the abdominal wound are united with silk sutures, three on each side, Fig. 2, and the balance of the incision in the abdominal wall is brought together by silk or silk-worm gut sutures.

Should the peritoneum have been cut, suture it with catgut.

Distension of the rectum is not necessary, and the skillful surgeon may even dispense with a distension of the bladder.

Dust the wound with iodoform, wrap some iodoform gauze around the catheter, and absorbent cotton around this. Retain the dressing to the abdomen by means of adhesive strips. Whenever soiled, the dressing should be renewed.

After-treatment. Join a rubber tubing several feet in length to the catheter by means of a glass tube, and place the end of the rubber tubing in a vessel under the bed. The urine will drain away very nicely unless the urine is thick or full of pus. Then washing out of the bladder through the catheter must be performed daily for several days until the cystitis is better, or, at least, until the urine becomes clear.

The sutures are removed on the eighth day, when the granulating wound may be treated with antiseptic salve. The catheter is left in



FIG. 3.



FIG. 4.

the wound about two or three weeks, until the fistula in the bladder begins to contract, then it is removed, and a larger catheter may take its place. Fig. 3 shows a patient with a medium-sized soft rubber rectal tube in the fistula.

A plug of soft rubber may be inserted into the fistula to keep it open, and this may be retained by means of adhesive strips (see Fig. 4), which shows a patient on whom Dr. J. P. Salb and myself operated over seven years ago. The patient is still living, and enjoys life better than before the operation.

The Effects of the Operation. The effects of the operation are always beneficial, when one remembers the condition of the patient demanding

the operation. The difficult, or perhaps the ineffectual or impossible catheterization may be dispensed with, and the vesicle tenesmus is always relieved, or, at least, urinating is made easier. Rest and sleep return, and pain disappears. The cystitis and the hypertrophy improve, the former frequently disappearing entirely.

During the first five days after the operation the urine flows away constantly; after that the patient can control it somewhat. Later on, if a plug is used, the patient can drain off the contents of the bladder by means of a catheter at frequent intervals, or a Senn catheter, which is self-retaining, may be used.

JASPER, IND.

SUDDEN DEATH FOLLOWING REMOVAL OF TONSILS.*

BY J. A. STUCKY, M. D.

J. A., aged fifteen, consulted me February 21, 1899, giving the following history: Had been in bad health for past two months, though not confined to bed or house; been at school most of the time. Had been suffering with "sore throat, tonsillitis, and quinsy." Had been much worse for past two weeks, the throat trouble being aggravated by "hacking cough." He had been referred to me to have his tonsils and adenoid removed.

Patient showed evidence of genuine illness; rigors and hot flashes at short intervals; palor, hectic, pulse quick and full; temperature 101° F.; constant headache; characteristic appearance of mouth-breather from adenoid obstruction. Left tonsil enormously enlarged, protruding beyond the median line, of soft, spongy, and fungous appearance, crypts and follicles filled with pus, evidently oozing from a chronic peritonsillar abscess. Vault of pharynx filled with adenoid vegetations covered with offensive discharge, similar to tonsil. Tongue coated and breath offensive. There was no evidence of active inflammation, but on the contrary, a diagnosis of general septicemia due to absorption of retained pus and muco-pus in tonsillar, peritonsillar, and adenoid tissue was made, and removal of diseased and suppurating tissue advised. This was consented to, and patient sent to St. Joseph's Hospital.

Dr. John Scott, after examination of the patient, said there was no contra-indication to administration of anesthetic, and gave him chloroform, after parts had been thoroughly cleansed with antiseptic solution

* Read before the Lexington and Fayette County Medical Society.

by means of atomizers. Very little anesthetic was needed, and was taken without an unpleasant symptom. The throat being large, every step of the operation was easily and quickly done. The tonsil was removed with tonsillotome, adenoid with Gottstein's curette. There was little more than the usual hemorrhage, and, after spraying parts with iced dioxide hydrogen solution, the patient was put to bed in good condition. On account of the general septic condition, and suspecting him to be "a bleeder," I remained an hour and a half after he recovered from the anesthetic, and left him in good condition and quite cheerful. Instructions were left with the nurse to use iced spray (25 per cent hydrogen dioxide in Sieler's solution) if there was any free oozing of blood.

Within thirty minutes after leaving a hurried telephone message was received, saying patient had just vomited, and was bleeding profusely from nose and mouth. I was at his bedside within ten or fifteen minutes; the bleeding had checked considerably under the use of the spray. Pulse was quick, expression anxious, great restlessness, and every indication of impending collapse. A hypodermic injection of ergotine, $\frac{1}{10}$ gr.; strychnia, $\frac{1}{30}$ gr., and morphia, $\frac{1}{4}$ gr. was ordered, while I proceeded to thoroughly remove all blood and clots. Examination revealed no special bleeding point, but a very general oozing of venous blood; very little arterial oozing was found.

Most of the bleeding was from the tonsillar and post-pharyngeal surface. After drying the parts, an application of McKenzie's styptic solution, followed by sol. ferri per. sulph., applied by means of cotton-covered probe, effectively stopped all bleeding.

Before completing this treatment Drs. Scott, Kinnaird, and Patterson arrived, approved of the treatment pursued, and agreed with me that the patient would probably soon react and rally if there was no further bleeding.

After waiting a few moments, the pulse being fairly good, though weak and irregular, it was decided to use transfusion of hot normal salt solution. Within three hours three pints were used subcutaneously and readily (apparently) absorbed. Whisky, strychnia, and digitalis were also given hypodermatically as indicated.

Efforts to sustain life by these means failed, and the patient died nine hours after the operation, and seven hours and a half after the secondary hemorrhage had been entirely controlled. As to the imperative and immediate indication for the operation, there is in my mind no

doubt. I am equally positive that death in this case was coincident with the operation, the latter being the exciting, not the immediate cause.

It is well known that no operation (when indicated) gives such remarkable results as that for removal of adenoid tissue; also, their removal is always accompanied by very free venous bleeding. In this case the loss of venous blood at the time of the operation was little more than is usually the case, and all bleeding stopped within a short time without the use of any styptic except iced spray of dioxide hydrogen and alkaline antiseptic solution.

Within a few moments after appearance of secondary hemorrhage I thoroughly cleansed all bleeding surface, nearly all of which was venous, there being no evidence of a vessel of any size being severed; there was no special bleeding point discovered, but instead a very rapid, free oozing of venous blood, which was easily controlled by the applications of the styptics referred to.

The most plausible theory to my mind as to the cause of death is the entire system, with all its recuperative force, had been so exhausted and undermined by sepsis that reaction was impossible, though every facility for promoting this was easily at hand and freely used. I know of no other way to account for the result, because I do not think enough blood was lost to cause death, and this did not occur for seven and a half hours after the bleeding was completely controlled. Admitting the hemorrhagic diathesis does not account for the unexpected and terrible result.

I am forced to the conclusion in this case I was dealing with a septic condition of affairs, that nothing short of what was done would have relieved the patient, complicated with a hemorrhagic diathesis, and "that something which passeth understanding."

LEXINGTON, KY.

ACTION OF POTASSIUM IODIDE UPON THE BLOOD OF SYPHILITICS.—Colombini and Geruli. Action of potassium iodide upon the blood of syphilitics. (*Giorn. ital. d. Mal. vener.*, 1897, fasc. 1.) Iodide of potassium given during the early stage of syphilitic infection causes an increase in the number of red corpuscles and in the amount of hemoglobin. Continuing the administration one sees a diminution, and then again an increase. On stopping the iodide the number of red corpuscles and the amount of hemoglobin tend at once to diminish, but there then follows a rise. The iodide serves to overcome the gravest syphilitic anemias. With the improvement of the condition of the blood there is a marked increase in body weight. (*From Arch. ital. de Biol.* v. 29, 1898, p. 216.)—*The Dominion Medical Monthly.*

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, February 10, 1899, Thomas Hunt Stucky, M. D., President, in the chair.

Purpura Hemorrhagica. Dr. H. C. Sharp, of Jeffersonville: This boy, aged four years, I first saw on December 27, 1898. Dr. Graham had seen him two days before. Then his limbs were slightly edematous, and about the buttocks, legs, arms, etc., were maculæ purplish or a bright red. Pain was intense throughout the abdomen; there was diarrhea and loss of appetite; the urine was scanty. It contained no albumen; reaction hyperacid. In time the eruption became papular, and was accompanied by much itching. About three weeks ago pain developed in the joints; the eruption was then confined to the legs; the scrotum was edematous; the abdomen in a condition of ascites. The pain in the joints was aggravated by pressure or movement. Last Monday a swelling appeared upon the left side of the head; other swellings have since appeared along the spine, and now one may be observed on the right side of the forehead. These tumefactions become greenish in color and finally pass away. Another swelling appeared to-day upon the back of the left hand. Last Wednesday there was a slight hemorrhage into the conjunctiva (right) which has not yet been entirely absorbed. The eruption may still be observed upon the buttocks, back, and arms. The boy's temperature throughout has ranged from normal to 102° F., but most of the time it has been normal.

The small swellings mentioned appear first in one place and then disappear; then reappear in other situations.

Discussion. Dr. William Bailey: I would unhesitatingly say this is a case of purpura hemorrhagica not presenting unusual features. The pseudo-rheumatic pains are often present. I will not speak as to the pathology, whether it is simply a change in the blood or the vessels, whether of nervous origin or what not. The treatment is largely to improve the condition of the blood, control the hemorrhages by the

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

administration of ergot, the use of muriated tincture of iron internally. These measures, I think, would relieve the case in a short time.

Malformation of the Genitals. Dr. Thomas Hunt Stucky: This case is one of malformation of the genitals in which there has been a great deal of discussion as to whether the individual is an hermaphrodite or not. I will ask Dr. Cartledge to demonstrate the condition present.

Dr. A. M. Cartledge: Some months ago this individual was referred to me by Dr. Vance with a letter from Dr. Phillips, of St. Louis, also letters from other physicians who believed it was probably a representative of a class of individuals we have usually regarded as possessing duality of sex—hermaphrodites. Of all such cases I have seen, this seems to be the nearest approach to an hermaphrodite, although I am not sure that this individual is one, or that such a case ever existed, that is, one possessed of both male and female organs. I consider this an unusual case of hypospadias, and in my opinion the cul-de-sac is an exaggerated urethral pouch. There is a distinct depression at the vaginal site, but it is merely a depression, as there is no perforation of the skin or fascia. There is a rudimentary penis, perhaps three quarters of an inch in length, with a distinct foreskin. The testicles are found upon each side in what would be the labiæ of the female, and there is no vestige of a scrotum. The pubic hair and general contour of the pelvis is distinctly female. The mammary glands are well developed, about what we would expect to find in a female of sixteen years. The individual claims to be about thirty years of age.

If the case is simply an unusual hypospadias, you may ask how I account for the development of the mammæ? At first sight that might appear puzzling, but it must be remembered that excessive mammary development in the male is not an infrequent occurrence; further, it must be remembered that this individual was considered a female until fourteen years of age. This would in a measure account for the mammary gland development. The shape of the pelvis is more like that of a male, while its general contour is distinctly female. The development of the lower extremities does not appear to bear any distinct evidence of male or female, but seems to be between the two. The calves are rather muscular, the feet larger than those of the average female; the arms, chest, and hands are more like those of the female than the male. The back appears more like that of a male, while the thighs are distinctly female.

With the individual lying in the prone position, with the legs elevated, by opening the large labiæ containing the testicles it is observed there is no vaginal orifice, and where the clitoris should normally be we have this rudimentary penis. We find the urethra is not through the penis, but immediately under it. By reflecting the prepuce a well-formed glans penis appears, the total length of the organ being not more than three quarters of an inch.

Discussion. Dr. T. S. Bullock: This is, like all other cases of the character I have seen, simply an exaggerated hypospadias. I do not believe there is any such thing as a true hermaphrodite; ordinarily cases represented, or believed to be of this type, are of the character this case presents. We have here an hypospadias with the testicles in an abnormal position; they are out of the abdomen, but they are undescended. The pouch or cul-de-sac is common in cases of hypospadias, and I have seen cases which partook more of the female type, with an hypertrophied clitoris and with ovaries abnormally situated. Such cases on close examination will be found to be not true cases of hermaphroditism, but male, just as in the case before us, with some malformation of the penis, undescended testicles, etc., or female, with malformed and hypertrophied clitoris and abnormally placed ovaries.

Dr. A. M. Vance: While in the hospital for the ruptured and crippled some years ago I had occasion to examine a great number of these special cases of lack of development, and Swasey, formerly an interne at this hospital, wrote a paper upon the subject, in which he collected twenty cases. They were all male. I have never seen one that partook of special characteristics of the female, and question whether there is any such thing as a true hermaphrodite. Yet we frequently see reports of such cases in medical literature; I saw one recently in which the author described a case having a penis and ovaries. I have never seen one that was not a male. The individual before us is distinctly a male; he has two testicles, as already stated, in the labiæ, also a small penis. The shape and general contour of the body is about as described in most cases of hypospadias. The development of the mammæ is the only thing that points especially to the female sex. There is a little pigmented skin at the base of the urethra, but there is no opening in the perineum, except the urethra immediately under the rudimentary penis. The urethra is illy developed, and the pigmented skin has no especial significance. I take it this is simply a

case of hypospadias, and I question whether there was ever such a thing as a *double-sexed* human being.

Dr. Louis Frank: I think the condition in this case is more than a hypospadias; we have arrest of development of the external genitals at a very early period of intra-uterine life. We have non-descended testicles and imperfect development of the scrotum due to this fact. But we find the breasts fully developed. There is absence of hair on the face, but the hair about the pubes grows as it does on the female. It would seem to be more than a simple hypospadias. The pouch, I think, is explained by the fact that the individual, in frequent exhibitions of himself, has endeavored to show that he has a vagina. There is no evidence of ovaries or uterus. He has not even an enlarged prostate gland.

No well-authenticated cases have so far been reported wherein the organs (in individuals partaking of the male character), supposed to be analogous to the ovary, have shown any true ovarian structure. Conversely, in cases where the female elements predominate, the organs analogous to the testicles have shown no true testicular structures, but are merely masses of fibrous tissue. Numerous cases are reported in which there has been a well-developed penis, with, also, a well-developed vagina, uterus, and tubes, with those organs which are analogous to the ovaries in the female, presenting all the physical evidences upon ocular inspection, etc., of both male and female. In Keating & Coe's Clinical Gynecology you will find one or two cases which are supposed to be true hermaphrodites.

It requires the microscope in all these doubtful cases to enable us to say positively whether they are true hermaphrodites or not. In the present case I believe we have more than merely an hypospadias; we have an arrest of development approaching hermaphroditism at least, but I consider the individual a male. I say this, realizing that there are many features about the case which are distinctly female. There is no evidence of ovaries, tubes, or uterus, but in other respects the individual resembles a female rather than a male.

Dr. C. A. L. Reed, of Cincinnati: About twenty years ago an individual was making the rounds of medical schools and clinics with a written analysis of his case which had been prepared by Prof. Virchow. The condition more nearly approximated that of true hermaphroditism than any case I have ever seen. The individual was raised as a girl, had menstruated, was married first as a wife, but after marriage the

male element preponderating, the individual secured a separation from her husband and again married, this time playing the rôle of a husband. In that case there was clearly a rudimentary cervix, a small, narrow vagina, and there was, just as in this case, a pair of testicles located in the labiæ. The penis was nothing more or less than an enlarged clitoris; but in that case there was a very much more pronounced development of the glans penis than in the case before us to-night, and it was capable of erection. I do not know that the ovaries were ever demonstrated, nor do I know that there was ever an emission of semen during his attempts at copulation. My recollection is that in Prof. Virchow's analysis of this case it was stated that the ovaries could not be detected, but that the female part of the organism had developed to the point of functional activity and to the extent that menstruation occurred with more or less regularity. Later, as I have stated, the male elements of the organism became predominant, and menstruation was abated. The individual at that time was aged forty.

The paper of the evening, "Some Post-Operative Effects of Abdominal Surgery Viewed from a Medical Standpoint," was read by Thomas Hunt Stucky, M. D. [See p. 161.]

Discussion. Dr. T. S. Bullock: I think we are all agreed that there have been many unnecessary surgical operations performed. Women have been unnecessarily mutilated in the past, but a reaction has been progressing in this direction for some time. Most of the post-operative troubles alluded to were due to the fact that many of these cases were probably unsuitable for operation in the first place, and in the second place the surgeons promised too much from operations. Resort to the knife has been considered the panacea for all pelvic affections. Now that the fever for operation has subsided, and cases are selected with more regard to the needs of the patient, I believe we will not see so many post-operative sequelæ. Of course herniæ and adhesions in some instances are unavoidable. The prime cause, I think, however, is a lack of understanding of the pathology of pelvic diseases, and the uterus and its appendages have had to bear the brunt of troubles for which they were not responsible. I believe hereafter we will not see or hear so much of these obscure nervous phenomena which are now attributed to surgical operations. No important function can be arrested, as in the production of artificial menopause,

without some trouble; but it is the experience of most operators that not much more trouble occurs when the menopause is artificially produced than when it occurs physiologically.

Dr. Louis Frank: Post-operative effects may be properly classified, as Dr. Stucky has done, into those which are functional and those which are mechanical: due to adhesions, herniæ, sinuses, etc. The latter with improved methods of operating and technique are becoming decidedly less. Herniæ and sinuses are far less frequent than formerly. In doing away with the drainage-tube we do away with post-operative sequelæ due to mechanical means. Post-operative adhesions will give rise to certain symptoms. The nervous phenomena which follow operations are not much worse than those which occur at the time of the menopause. Cases operated upon wherein there is pre-existing mental disorder may be expected to show more violent post-operative symptoms. These cases should not under any circumstances be operated upon. I take it that no surgeon at the present day ever operates for the cure of hysteria, hystero-epilepsy, neurasthenia, or other obscure nervous troubles, as was formerly done. Such symptoms as result from the induction of the menopause may be ameliorated by the use of ovarian extract.

Dr. F. C. Wilson: Occasionally the occurrence or implantation of another disease upon the abdominal viscera may sometimes be confounded with symptoms which have been attributed to operation. I have met with several instances where, after a surgical operation which seemed to have benefited the patient markedly, tuberculous disease of the abdominal viscera developed. Whether the operation of itself, or the adhesions which existed, conduced to this result I am not prepared to state. Many of the symptoms brought about by tuberculous infection of the peritoneum may closely simulate those which have been attributed to the operative procedure. Those cases ought to be excluded from the class referred to, which are chargeable to the operation itself.

Dr. A. M. Cartledge: It is always interesting to specialists as well as surgeons to get information from the physician's standpoint. The paper is timely now, but if anyone could have had the foresight to have written such a paper six years ago, it would have been productive of much more good than it can possibly do now, because we are constantly correcting the evils mentioned. The essayist shows how imperfect that work in the abdomen often is, and how in many cases where the operation itself is a success the results are disastrous. But abdom-

inal and pelvic surgery, like other things in medicine, has had to undergo slow evolutionary advancement; and I think we can take pride in the standing of this department of surgery to-day. Its present high standing is the result of our having groped our way through many hard and dark places which finally led up to it. We have profited by our experience.

There is still great room for improvement in surgical methods and technique. I do not believe the minds of the profession or those engaged in this line of work are still impressed with the necessity of conservatism which hopes to avoid many of those unpleasant effects to which the doctor has called attention.

In regard to the induced menopause, the longer I practice the more I am impressed that the results are disastrous in many instances from induced menopause. To suddenly arrest this physiological function in a woman from twenty to thirty years of age by the effect of a surgical operation is quite a different thing from such function being terminated by nature at the age of forty or forty-two. Most abdominal surgeons now attempt to save some portions of the ovarian tissue where it is possible to do so. I now resect ovaries, leaving small pieces which appear to be healthy, where I formerly swept them out. I sometimes leave an ovary which is slightly diseased, or, if it is possible, I leave some of the ovarian stroma or ovarian tissue—any thing to keep the woman menstruating. We must not leave positively diseased tissue which may conduce to subsequent trouble, but if it is consistent with the symptoms and conditions present to leave even the smallest amount of ovarian tissue, it is advisable in all instances. I now resect small cysts from the ovaries, and I believe that every surgeon does not remove ovaries at the present day which were formerly extirpated. We can all remember when a usual sight was a plate of ovaries before a meeting of this kind. Such a sight is now not often witnessed. We now drop back ovaries into the cavity when they appear healthy; formerly we searched more closely to see if there were not present little cysts, which were then regarded as pathological, but which are now not so regarded.

In regard to adhesions, we have lessened this factor in a remarkable way. We have almost dispensed with drainage; we are handling structures that we are not going to operate upon less and less. And I want to say that the paper is erroneous when it gives the idea that adhesions, permanent adhesions, of necessity follow intraperitoneal opera-

tions. Wherever raw surfaces are left, adhesions must form; but in the absence of excessive traumatism in inflammatory troubles, adhesions do not follow, and the abdomen is wiped dry and clean, and it is as perfect as it was before. Perfect removal of all diseased structures is not conducive to the formation or existence of adhesions. Many adhesions are from imperfect work. All surgery is more perfect now than it was formerly.

I do not believe it is countenanced anywhere at the present day to open the abdomen and remove ovaries for the attempted relief of nervous disturbances. This was a great mistake of the profession. Formerly the very term hysteria was an indication for ovariectomy. It was thought by surgeons if Mr. Tait or other eminent operators removed the ovaries and cured these nervous affections of women, there could be no further question, and the operation was indicated in all such cases. Every now and then an observation would be made that cases were cured. Such observations may have been honestly made, but it led the profession into a disastrous practice. We now know that these women were not cured, and in the majority of cases the trouble was far deeper than the ovaries; it was in their heads. We can not get things out of patients' heads by removing their ovaries.

Dr. A. M. Vance: There is undoubtedly a great deal in what Dr. Stucky has given us to-night, but he has certainly not made out a very strong case against us as surgeons. Of course I am expected to be on the side of the defendant. I think it would have been a little fairer to the surgeon if he had entered into the particulars as to the cases referred to, what their lives had been previous to the operation, what drugs they were in the habit of taking before the operations, and also afterward. My experience with these chronic cases of pelvic disease is that they have been through the hands of doctor after doctor; they have tried various and sundry hypnotics; they are drug habitues prior to the operation—opium or morphine users. I am thoroughly convinced that many of the neurotic symptoms are due purely to this habit; that the habit has been kept up sometimes, even with the cognizance of the doctor, for a long time. If the essayist had gone into his cases a little more in detail, as I have outlined, he would have made a fairer statement.

We, of course, do not claim to be absolutely sure in our prognosis of curing the women when we operate upon them, nor does the physician promise an absolute cure in any case he works upon.

I do not take very much stock in the matter of adhesions. I admit that a few cases of strangulation from this cause may occur, but only a very few. If adhesions caused a great deal of trouble, all of our appendicitis cases, gunshot wounds, knife wounds, and various inflammatory troubles of the abdomen and pelvis would die of strangulation. They do not die, and the adhesions clear away, as proven by second operations for herniæ, etc. I believe as we go along we will learn to do better work.

I remember to have taken out but one pair of healthy ovaries, and am sure in that case it did good. Dr. Cartledge will remember the case; he resected the spinal accessory nerve; a woman at the city hospital who had hystero-epilepsy. She is now earning her living, which she could not do before.

I believe, as I have said before, that if these cases were analyzed, that the vast majority of them would have a drug element either before or after the operation. If the doctor would use his hypodermic syringe more for strychnine and less for morphine, he would have less post-operative neurasthenia.

Dr. L. S. McMurtry: In this department of our profession, as in all others, the physician and surgeon should be thoroughly co-operative; and when it comes to the summing up of results, their conclusions should be without prejudice.

When modern pelvic surgery was founded, not a great many years ago, pelvic pathology, especially the relation of the nervous system to the pelvic organs in women, was in a very crude state. As is known, Battey, who was one of the original workers in this department of surgery, introduced what he called normal ovariectomy. This was done, not for disease of the ovaries themselves, but to cure intractable cases of pain and nervous disturbances. That was one of the initial steps in the founding of this department of surgery, and while we now know that the fundamental principle is fallacious, still it aided in the beginning of modern pelvic surgery. As has already been stated by a previous speaker, there is no department of surgery or other science which has not passed through a stage of evolution, there having been many changes and improvements before perfect work was reached.

This entire subject, in all of its bearings, has been gone over in detail during the past five or six years by the special societies in this country which have devoted themselves with so much assiduity to perfecting modern gynecology. This subject has been discussed time and time again.

It is well known that when this work became popular, numbers of physicians had patients that had been under their care for years and years, chronic cases, the majority of whom had the opium habit. These cases exhibited neurotic conditions, nervous and menstrual disorders. When the idea of Battey became known, this class of cases were the first to seek relief by surgery.

In many instances surgery failed to relieve; in others, what relief was brought about by surgery was entirely counter-balanced by prolonged invalidism, the opium habit, and general exhaustion that had obtained during the long period of invalidism. Again, surgeons are sometimes called in to operate, and I think some of the cases referred to by the essayist are of this class, where the operation has so long been delayed that the patient is incurable. All surgeons engaged in this work will remember that in their earlier experience they undertook to operate upon cases which now the physician does not permit to go to such advanced stages of disease before calling the surgeon. The effects of prolonged disease upon the nervous system and the blood itself had reduced these women to a point of invalidism beyond recovery by surgery or any thing else. Surgery is not to blame in these cases; they were fatal because they were beyond the limits of help. This will, in great part, explain why recent results are superior to the results of early work in pelvic surgery. Those of us who are constantly engaged in abdominal and pelvic surgery have cases of neurotic character referred to us with the expectation of an operation being done that will cure the patient. An experienced pelvic surgeon will recognize a class of neurotic cases that are incurable by the removal of any or all the pelvic organs; the disease is in the nervous system and not amenable to surgery. It is an axiom universally accepted by gynecic surgeons that an operation should not be done except for demonstrable lesions. I think when we thoroughly understand one another we will find that the blame is no more attached to the surgeon than to the physician in this surgery. Indeed, no blame rests upon either; all are striving to cure a class of cases that have been the approbria of both medicine and surgery prior to the modern era of great advancement.

In regard to operations upon the pelvic organs of the insane: My friend, Dr. Reed, who is present with us this evening, has been one of the pioneers in this country in the development of that work, and I hope he will have something to say upon this part of the subject. In this department much has been expected, and the results, while most

brilliant in a limited class of cases, have not realized the expectations of early enthusiasm.

When we come to consider adhesions, I find it very rare that post-operative adhesions are the source of trouble. It is exceedingly rare that under the perfected aseptic technique adhesions following operations do any harm. Thoroughly aseptic adhesions take care of themselves, and secondary operations which have frequently been done have shown that these adhesions have disappeared. I have not seen a single fatal case of obstruction from post-operative adhesions. We are inclined to attribute a great many untoward results to the operation, whereas there are many things inside the peritoneal cavity that may be the source of renewed disease and distressing symptoms.

The highest regard for conservatism is now observed in advanced pelvic surgery. Gynecologists are insisting that wherever fibroid tumors can be removed from the uterus and the uterus itself preserved, this should be done; and it is being done whenever practicable. Where ovaries can be resected and diseased tissues removed, this should be done and ovarian tissue preserved as far as possible. This principle of conservatism is a conspicuous feature in the high-class surgery of the abdomen and pelvis. The mortality has been reduced, and convalescence rendered safe and free from suffering to a degree that is wonderful.

In conclusion, I will say that in the discussion of this subject I do not see any reproach whatever to pelvic surgery, nor any thing that can detract from its brilliant triumphs.

Dr. C. A. L. Reed: As to the mechanical effects of these operations, it was not stated by the essayist that adhesions were always due to the operation. I am glad he left that point open. Some recent experience makes me believe that many of these adhesions are ante-operative. They may be ante-operative and be overlooked at the time of the operation. For instance, within the last ten days I operated upon a patient in whom it was necessary to separate adhesions between the colon and the parietal peritoneum for an extent of over nine inches. The woman had never been operated upon previously. She had been having intense intestinal colic which at times presented almost unmistakable symptoms of internal strangulation. Within the last week I opened the abdomen of a young man nineteen years of age who had been in bed seven months. He was in a state of extreme emaciation, and a diagnosis of tabes had been made. An exploratory incision being necessary to a diagnosis, I opened the abdomen and discovered a band of

adhesion which had constricted to the point of strangulating the duodenum within four inches of the stomach, seriously interfering with peristalsis, and of course with that function which depends upon it. Here are two cases of ante-operative adhesions of the intestine which, had they been observed after the operation, would have been attributed to the operation. I can recall other similar cases.

There are some other features to which I would direct attention for a moment. I believe instead of handling the viscera too much, we frequently do not handle it enough, and very often unsuspected complications are overlooked and permitted to remain because of lack of completeness of our exploration.

Let us take up gradual impairment of nutrition with associated nervous phenomena, which are classified under the head of neurasthenia. We once looked upon neurasthenia as purely a neurotic affection. I think nobody so recognizes it to-day. Formerly we were disposed to look upon the condition as having a reflex origin, and many were the cases operated upon for relief of this condition which was supposed to be due to intra-pelvic states, which, upon operation, were not demonstrable. We now know the remarkable control of the sympathetic system over the function of nutrition, and we know that in these intra-pelvic diseases there is always impairment of peristalsis; there is always impairment of the nutritive function due to lack of proper nerve control. We know that in many of these cases removal of the offending organ from the pelvis results in restoration of the functional power of the nervous system, and in restoration of this feature of nutrition. The most pronounced effect of this nerve control over the alimentary canal is to be found immediately following an operation, when we notice complete arrest of peristalsis, which comes coincidental with pain; for instance, following removal of the appendages. It is only after this has subsided that we get normal peristalsis and the bowel moves on.

Where there is impairment functionally of the bowel, we nearly always have a pre-existing history pointing to this fact, and we nearly always have that auto-infection which we recognize as the underlying factor of these neurasthenic cases. The fact that these systems have become loaded down with uric acid—urea—xanthin and paraxanthin, the fact that these poisonous products are absorbed and thrown off by the bowels should lead us to consider that many of these cases of neurasthenia are nothing more nor less than stercoremia. When the cause is removed the patient will often recover promptly.

The criticism in the paper lays most heavily upon the specialists; we are too strictly specialists, and as soon as we get through with our surgery we seldom see the patient again. I am impressed with the importance of the criticism; it is the kind of a criticism that sets the profession to thinking; it causes us to reflect that we are to a certain extent held responsible for the final result in operative cases; in any event, that the responsibility should not be borne entirely by the physician after the immediate effects of the operation have safely passed.

Dr. Jas. S. Chenoweth: From surgery alone we are apt to expect too much in those cases suffering from depressing nervous conditions. Few surgeons could now be found who would advise operation for simple nervous affections without there were evidences of pathological lesions. I would not operate upon any case where I could not find some indication of disease for which the surgery was to be undertaken. Surgery of to-day can promise, in cases not presenting too grave pathological conditions, not to leave the patient with any discomfort as a result of the operation itself, save in a few exceptional cases. Perfect technique in the abdomen, with little handling of tissues not diseased, with small incision, small amount of trauma, without drainage, and careful suturing, will give us almost no trouble from adhesions or other post-operative accidents, hernia, etc.

As to the matter of adhesions, I certainly think adhesions are more the friend of the surgeon than to be feared by him, as a protection against advancing infections. In clean surgery, with perfect technique, we do not need to fear adhesions. As to ante-operative adhesions, like Dr. Reed I have seen and operated upon two cases which exhibited them in marked degree.

By removing diseased structures in the pelvis we can relieve a great many cases where they are associated with nervous conditions, but we have little to expect from operations in purely nervous affections.

Dr. Turner Anderson: I do not know that I have seen a great many women who were harmed by having their ovaries taken out. On the other hand, I have seen a good many cases that were not helped by any line of treatment that the general practitioner, surgeon or anybody else adopted; I have seen these absolutely cured, made happy and comfortable, restored to society, to home companionship, by operation. I had the pleasure of seeing Dr. Battey do his third normal ovariectomy. The subject was a Mrs. Q., in this city, and the operation was performed in 1875. This patient was a confirmed neurotic, and more than that, she

was a chronic invalid. Dr. J. Marion Sims was here, and this patient was examined by him at the Galt House. Battey examined the case and suggested that he would operate upon her; that this was the character of case in which his operation of normal ovariectomy should be done. This patient had not been able to sit down for a number of years; she could walk about and enjoy a certain measure of quiet, but could not sit down. A careful exploration of the intra-pelvic organs revealed the fact that she had a displaced ovary. We see such cases quite frequently. Battey did his operation. He opened the peritoneum behind the uterus, made his incision in Douglas' cul-de-sac, and had a great deal of difficulty in removing the ovaries, but it was finally accomplished. Dr. Murdock, of Pittsburgh, was present and gave ether. That woman was benefited. It was a normal ovariectomy; she did not suffer from cystic disease of the ovaries; she had no intra-pelvic process which would produce adhesions, etc.; she was profoundly neurotic and a chronic invalid. She recovered after the operation and became entirely well, and was able to do what she had not done for years, to sit down. I can not say that I have seen a great many women who have been so very markedly harmed by our operative procedures; but on the other hand I have seen a large number, which I presume is the observation of every other surgeon, who had resisted all other methods of treatment at the hands of surgeons and general practitioners, who were entirely relieved by operation.

Dr. Thomas Hunt Stucky: I was struck with the unanimity of the way in which the surgeons apologized for their work. My paper was not intended to be a criticism of the work of the surgeon up to the present time, but rather as a comment upon the improvement in their work now as compared with five or more years ago. When the first improvement in abdominal technique manifested itself I do not know, but it is a noticeable fact that within the last three or four years there has been a very marked lessening in the amount of after-disturbances upon the part of patients. If I were compelled to make a criticism of the abdominal surgeon's work, it would be this: the abdominal surgeon, after receiving the patient from the physician, operates, sends his patient home, with no instructions to the physician, and no advice or suggestion as to the after-treatment.

I believe where both ovaries are removed very good results are obtained and have been obtained by the administration of ovarian extract. I believe that in all these neurasthenias which we encounter;

the trouble is primarily an auto-intoxication, and the condition is perhaps one of lithemia, and the disturbances resulting therefrom are exaggerated or augmented by the pathological condition.

It is a reflection upon the surgeon as well as upon the physician who has referred the patient, to have after-complaints as to the non-fulfillment of promises of cure. Cure does not mean the completion of the operation and healing of the wound, and I believe it would be better to the patient and greater justice to the surgeon and the physician, if the chain of after-effects necessarily following would be fully explained. There should be a free exchange of opinion between the surgeon and the physician after the operation has taken place.

I would like to make one comment upon what my friend, Dr. Vance, has said about the hypodermic syringe. The criticism practically is a just one, but Dr. Vance in a thousand years could not make me believe that any progressive practitioner of to-day is using opium by the mouth, by suppositories, or by local application for the amelioration of these pathological conditions. None of us at present use much opium, except for the alleviation of pain.

As to the question of adhesions, I simply reported these cases as a result of observation. I have had no chance to hold other autopsies upon such patients. Within the last few months a case was operated upon in my own practice for secondary adhesions. But the purpose of the paper was to produce, if possible, a more cordial relationship, to impress upon the surgeon, if within my power to do so, the absolute necessity of following these patients beyond the line of the operation, after the operation has ceased, to give some after-attention to the patient, to instruct the general practitioner to whom the patient is returned what is necessary to bring about the restoration which the surgeon believes is going to take place. I believe the surgeon's work is only half done when he operates upon a patient and then turns the case over to the physician.

LOUIS FRANK, M. D., *Secretary.*

GLYCOLYTIC ENZYME IN MUSCLE.—Brunton and Rhodes. Glycolytic enzyme in muscles. (*Cent. f. Physiol*, 1898, p. 353.) Juice squeezed out of muscles by hydraulic pressure, when perfectly fresh, exerts a distinct glycolytic action on diabetic sugar and dextrose. It loses this property in a few days. They are undecided as to whether it is transformed into a zymogen or simply decomposed.—*The Dominion Medical Monthly.*

Reviews and Bibliography.

A Text-Book of Pathology. By ALFRED STENGEL, M. D., Instructor in Clinical Medicine in the University of Pennsylvania; Professor of Clinical Medicine in the Woman's Medical College, etc. With 372 illustrations. 848 pp. Price, cloth, \$4.00; half morocco, \$5.00. Philadelphia: W. B. Saunders. 1898.

The author has in this work presented the subject of pathology in a practical form and constantly from the point of view of the clinical pathologist. We are assured that considerable parts of the work were first prepared and used as the basis of demonstrations upon clinical pathology for students of medicine.

The discussion of methods of examination have been mostly excluded, as likewise has the pathology of the skin and the organs of special sense, these being matters presented in special works so much more completely than is here advisable. The illustrations are well executed, though few of them in colors.

When one finds a concise work on pathology reaching such dimensions as this, he feels to express the wish that discovery in that line has about reached its limit, unless something may be revealed to himself. We know nothing so complete in this line produced this side the ocean. D. T. S.

An Introduction to Pathology and Morbid Anatomy. By T. HENRY GREEN, M. D., F. R. C. P., Physician and Special Lecturer on Clinical Medicine at Charing Cross Hospital, etc. Revised and enlarged by H. MONTAGUE MURRAY, M. D., F. R. C. P., Physician to Outpatients and Lecturer on Pathology and Morbid Anatomy at Charing Cross Hospital. New (eighth) American edition. Thoroughly revised from the eighth English edition. By WALTON MARTIN, Ph. B., M. D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons, Columbia University, etc. Illustrated with two hundred and sixteen engravings, six in colors, and a colored plate. 582 pp. Price, \$2.50, net. Lea Brothers & Co. 1898.

Several changes have been made in the arrangement of the text in this edition. Several new illustrations have been added and alterations made in the arrangement of the text.

The work is essentially a treatise for students, and this means, not in contradistinction from practitioners, but teachers who might need larger and more elaborate works.

As the production of successive editors and revisers and other most competent teachers whom they have called to their assistance, its quality may be expressed in the announcement that this is the eighth American from the eighth English edition.

It is the text-book of the English-speaking peoples, with sway scarcely disputed. What a startling impression would have been produced, could

this work have been flashed on the medical world only twenty years ago! The most pronounced change has, of course, occurred in regard to bacteria and the means of defense possessed by the system.

In 1882 the reviewer wrote a short article for the New Orleans Medical Journal, entitled "The Rôle of the Leucocyte," taking the ground that the leucocytes were the ants, the bees, and the watchdogs of the system, the guards, the builders, and the scavengers. Dr. Matas, who was then the editor, accepted it for the leading article of the next issue. But before it came out the journal had passed into the hands of a coterie of young physicians, and they voted the article too fanciful for publication in a sober scientific journal. At that time nothing had been published in this country of Metschnikoff's wonderful discoveries. The "Rôle of the Leucocyte," however, went on record in the Southern Journal of Pharmacy, an obscure pharmaceutical journal of New Orleans. But Metschnikoff has filled the world with his fame. We must not, however, waste the reader's time, and will only add "Pathology and Morbid Anatomy," Green, eighth edition.

D. T. S.

A Manual of Venereal Diseases. By JAMES R. HAYDEN, M. D., Chief of Clinic and Instructor in Venereal and Genito-Urinary Diseases at Columbia University, New York, etc. With fifty-four illustrations. 304 pp. New York and Philadelphia: Lea Brothers & Co. 1898.

In this little volume is given, in a clear and compact form, a practical working knowledge of gonorrhea, chancroid, and syphilis. If the author has contributed little that is new, he yet nurses no fads.

Gonorrhea, in spite of all the ado made of retro-injection and the like, he treats mainly with the old astringent injections of zinc, lead, and the like, and in such style as would lead to the conclusion that the thorough and frequent removal of the putrescent pus is what is desired to be accomplished, which in fact is probably the case.

Chancroids are to be cauterized only with the greatest rarity, which being supported by all just experience, makes one wonder why the patients of past ages do not turn upon the surgeons in a regular ghost-fight for all the useless pain inflicted with manifest aggravation instead of relief of disease.

He recommends gradual dilatation for the treatment of urethral stricture, and this is where his good sense comes in again.

In the treatment of syphilis he adds nothing, but follows classic lines.

D. T. S.

Cleft Palate; Treatment of Simple Fractures by Operation; Diseases of Joints; Antrectomy; Hernia, Etc. By W. ARBUTHNOT LANE, M. S. 278 pp. Price 5 shillings. London: The Medical Publishing Company.

This is a little book, but full of thought, and evidently written by the author to disseminate the results of his own thoughtful study and observation. Its originality really entitles it to a fuller review than many a larger work, and more than space allows. In his first article, Cleft Palate, we

note, first, the contention that the pressure of breathing has much to do in promoting the growth of the nasal cavities, and that by enforced and continued nasal breathing among children, the growth of adenoids may be prevented and an increased capacity secured. In the operation for harelip he urges the use of sutures instead of pins, and criticizes operators for showing better results than he himself can attain. He contends that less scars are shown when pins are not used. If pins are reinforced with gauze and collodion in such a way as to allow them to be removed in a few days, it is hard to see the necessity of any scar beyond a white line.

In fractures he dwells with earnestness on the necessity of exact apposition not only for the speedy cure of the injury, but to prevent modification of related joints which takes place when the deformity changes the direction of the force pressing on them.

In the remaining articles, also, there is much originality, suggestive if not instructive.

D. T. S.

The Care of the Baby. A Manual for Mothers and Nurses. Containing Practical Directions for the Management of Infancy and Childhood in Health and Disease. By J. P. CROZIER GRIFFITH, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, etc. Second edition, revised. 404 pp. Price, \$1.50. Philadelphia: W. B. Saunders. 1898.

This work is offered by the author as a reliable guide for mothers anxious to inform themselves with regard to the best way of caring for their children in sickness and in health. And, in so far as the medical aspect of the matter is concerned, it is not easy to see how it could be better done.

The whole work gives evidence of having been produced by one well informed in his department, experienced and thoroughly sympathetic. It would be a fortunate thing for the country if every woman entering upon the duties of motherhood could avail herself of the helpful assistance of a treatise like this. We bespeak for it a cordial reception.

D. T. S.

American Pocket Medical Dictionary. Edited by W. A. NEWMAN DORLAND, A. M., M. D., Assistant Obstetrician to the Hospital of the University of Pennsylvania, etc. Containing the Pronunciation and Definition of over 26,000 of the Terms Used in Medicine and the Kindred Sciences, along with over 60 Extensive Tables. 548 pp. Price, \$1.25. Philadelphia: W. B. Saunders. 1898.

It is the avowed intention of the editor of this little work to develop the possibilities of the pocket dictionary to a degree not heretofore attained. A systematic gleaning has been made through the latest medical literature, and the vocabulary is strictly up to date.

A large amount of matter has been inserted in tabular form which will prove of value to students for memorizing while preparing for examinations, besides serving to group correlated facts in a convenient form for quick consultation.

One drawback it has in common with Gould's pocket dictionary: One will need an old copy to refer to, as the publishers have made these too pretty to use.

D. T. S.

Abstracts and Selections.

WEIL'S DISEASE.—Leick (*Deut. med. Woch.*, October 20, 1898) reports a fourth case from the Greifswald clinic. The four patients were all engaged on the same estate, and attributed their illness to contaminated food, with the exception of the last one. The author draws attention to the fact that during many years the only cases of Weil's disease have come from this one place, and have occurred within the last two years. In the present case a man, aged 28, was seized with vertigo, and a feeling of prostration, with pains in the splenic region. A few days later there was jaundice, loss of appetite, thirst, and diarrhea. On the fourth day vesicles appeared on the lips, and there was marked epistaxis. Delirium occurred, especially at night. On admission, there was marked jaundice, as well as petechiæ scattered over the body. Temperature 31.2° C.; pulse 112. The spleen was distinctly enlarged, and the urine contained a little albumen. Under treatment, mainly dietetic, the temperature gradually fell and the other symptoms diminished. The pulse fell to 50 beats a minute. Convalescence was slow and interrupted. On the nineteenth day after the onset there was a relapse, the fever lasting several days. The illness presented all the characteristics of Weil's disease, including the tenderness over the liver and the muscular pains. The etiology is very obscure. Bacteriological and other examination of the blood was negative. The author vigorously opposes the view that Weil's disease is really enteric fever complicated by jaundice. Widal's reaction is absent. He looks upon it as a disease by itself, of which the specific infective virus is as yet unknown.—*British Medical Journal*.

BILATERAL LIGATURE OF THE INTERNAL ILIAC ARTERY.—Quénu and Duval (*Rev. de Chir.*, November, 1898) published the results of a study of the anatomical relations of the internal iliac artery, and describe a method, based on these results, of practicing bilateral ligature of this vessel by the transperitoneal operation. That this operation is now one of practical interest, and not merely a dissecting-room exercise, is shown by a list of 14 recent cases, in which both internal iliacs have been tied with the object either of producing atrophy of a pathological growth (enlarged prostate, uterine fibroma) or of preventing free hemorrhage during removal of the rectum and sigmoid flexure for cancer, or during total abdominal hysterectomy. In five of these cases the operation was performed in the old way, by double incision, and without opening the peritoneal cavity. In the remaining nine cases the transperitoneal method was selected, which method the authors have been led by their personal experience on both the living and dead subject to regard as the only rational and practical one,

whether for bilateral or single ligature of the internal iliac; the operation in itself is a safe one with regard to both immediate and remote results, and the circulation is soon completely re-established in the pelvic region supplied by the ligatured vessel. The abdomen having been opened by an incision in the middle line extending from a point just below the umbilicus to the pubic symphysis, the artery is exposed by a vertical incision of the posterior layer of the parietal peritoneum. The middle of this incision should correspond to the level of the upper margin of the sacrum. The operation is usually found an easy one when performed on the right side, but on the left side it may be attended with much difficulty when the sigmoid flexure is short and fixed by a narrow mesentery. In such case it would be necessary to penetrate both layers of the mesentery, the vessels to the large intestine being carefully avoided, and thus to divide three layers of peritoneum before the artery could be exposed.—*Ibid.*

TREATMENT OF SERPIGINOUS ULCER OF THE CORNEA.—Lesshaft (*Klin. Monatsbl. f. Augen.*, October, 1898) is of opinion that in the treatment of this condition attention should be directed in the first instance to the lachrymal passages, that is, in cases where the ulcer is apparently spontaneous and not due to trauma. The absence of any manifest dacryocystitis is no bar to the infective influence on the cornea of bacteria in the nasal duct. Accordingly he slits up the lower canaliculus and irrigates the duct with 1 in 5,000 HgCl₂ daily, washes out the conjunctival sac with the same solution, and applies a moist dressing with protective to the closed lids. In addition iodoform is dusted on the ulcer and inner canthus, and atropine is instilled. This line of treatment he has found immediately effective; the ulcer ceases to spread, infiltration becomes less and disappears, and hypopyon absorbs; scarring is reduced to a minimum. It is only in the event of the ulcer not yielding to this treatment that he employs and recommends the galvano-cautery, or, if the ulcer is very extensive, Saemisch's section.—*Ibid.*

INTUBATION IN SYPHILITIC STENOSIS OF THE LARYNX.—Sargnon (*Arch. Prov. de Chir.*, August) holds that intubation as practiced by O'Dwyer is the best method of treating laryngeal stenosis, especially that of syphilitic origin. Tracheotomy, it is allowed, affords rest to the diseased larynx, and, when combined with an active specific treatment, may be followed by rapid and complete cure. But intubation, the author holds, when practiced in similar conditions, gives the same results with greater rapidity by reason of the mechanical dilation effected by the tube; and, moreover, it does not leave an external and visible cicatrix. The practice advocated by Schrötter in chronic cases of stenosis, of performing tracheotomy and afterwards gradually dilating the strictured larynx by bougies, is not certain in its results, and in the rare instances in which complete cure has been effected this has not resulted until after a very prolonged and tedious course of treatment.—*Ibid.*

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THE PHYSIOLOGICAL EFFECTS OF ALCOHOL.

"Fill the cup and fill the can,
Give a rouse before the morn;
Every moment dies a man,
Every moment one is born."

The pernicious effects upon the economy of the habitual use of alcohol it would seem have been set forth with sufficient fullness by the countless writers and speakers who, since Neal Dow "took down his fire annihilator" more than half a century ago, have carried on a ceaseless crusade against this greatest handicap of human development.

Many of the statements of these temperance reformers were doubtless exaggerated; but not a few of the counter-statements made by the toppers and their powerful allies—the liquor makers and sellers—have been quite as much overstated and are more misleading. For instance, an English authority, some three or four years since, published as truth, backed by statistics, the statement that longevity in England was conditioned by alcohol, as follows: Longest lived, moderate drinkers; next in longevity, liberal drinkers; next, habitual drunkards; shortest lived, total abstainers. This looks like a home thrust for tippling, but, in fact, can any accurate statistics as to the longevity of alcohol habitues be obtained? Since tippling is not an occupation or profession, the period of drinking by the average tippler can not be fixed. Again,

not one in fifty of the cases of death which are indirectly due to alcohol are ever returned as such. And lastly, there can be no scientific fairness in counting against abstinence, and thus enhancing the credit of tippling, all the deaths due to accident, consumption, typhoid fever, etc., during adolescence and early manhood. When these errors are eliminated—in short, when correct statistics are obtained—there can be no doubt that total abstinence will distance tippling in the race for longevity by figures that will relegate the latter to a low place in the scale.

The following clipping from the *New York Medical Journal* of the 11th ult. should be carefully read by all who are inclined to hunt for physiological excuses for drinking liquors:

THE EFFECTS OF THE HABITUAL USE OF ALCOHOL.—According to the *Dietetic and Hygienic Gazette* for January, Dr. Crothers, of Hartford, Connecticut, in a paper read at the New York County Medical Association, October 17, 1898, discussed this subject in a very conservative and intelligent way. He stated, among other things, that the ingestion of alcohol accelerated the heart's action ten or fifteen beats a minute at first, but that after a while the circulation became slower, so that the pulse-rate dropped at least as much as fifteen or twenty beats below the normal. Vision, he said, was always diminished and rendered unreliable by the ingestion of alcohol. The acuteness of the sense of hearing was likewise impaired. The increase in the pitch of the voice of persons under the influence of alcohol was due to impaired hearing. Hallucinations of hearing were frequent under such circumstances. The senses of taste and smell were also influenced by alcohol. The sense of touch was always exaggerated or diminished, and careful measurements of muscular force showed that the muscular system did not escape the deleterious action of this poison. If the temperate man suffered from the use of one or two ounces of alcohol in this appreciable way, then the continual or frequent drinking of alcohol must exert a distinctly deleterious influence. All experimenters agreed that when alcohol was taken in excess the result was a profound tissue and cell degeneration and general starvation of the tissues.

Alcohol, by its anesthetic action, soothed the irritable nerve centers, and the effects were so pleasing that the individual desired to repeat the experience. Often this desire to seek relief by its anesthetic effect was really an indication of a diseased condition, which, perhaps, was disclosed only by a post-mortem examination. A century ago the anesthetic action of alcohol created dementia and idiocy, but to-day it was more apt to cause delirium and paralysis. Heredity seemed to be one of the most prominent causes of inebriety.

The last paragraph is suggestive of one of the most subtle and seductive causes of alcohol addiction—namely, the use of liquor by nervous

women as a hypnotic. Every physician has neurasthenic patients who go to sleep nightly on a large drink, or drinks, of whisky or brandy. There is, perhaps, no more rapid road to inebriety than this, for to secure the hypnotic effect the dose must be from time to time increased.

A patient who had become an alcohol habitue from this cause recently consulted the editor. She informed him that she had begun the use of whisky as a hypnotic some two years ago for the relief of nervous insomnia, and that to obtain the effect she had been compelled to increase the quantity until now she was drinking a quart of whisky a day.

She had the florid, bloated countenance of an inebriate, and exhibited a painful jactitation of body and an irritability of mind that bordered on insanity, to which she is rapidly tending.

In view of these and many other facts, the same caution should be exercised by the physician in prescribing liquors as in exhibiting other enslaving drugs.

Notes and Queries.

POINTS IN THE ARSENICAL CAUSTIC TREATMENT OF CUTANEOUS CANCERS.—By William S. Gottheil, M. D. 1. The arsenious acid caustic treatment of skin cancers does not contemplate or depend upon the actual destruction of the new growth by the caustic.

2. The method is based upon the fact that newly formed tissue of all kinds has less resisting power than the normal structure when exposed to an irritation and its consequent inflammation. Hence the former breaks down under an "insult" which the latter successfully resists.

3. If, therefore, the whole affected area can be subjected to the influence of an irritant of just sufficient strength to cause a reactive inflammation intense enough to destroy the vitality of the new cells, the older normal cells will survive.

4. Arsenious acid of properly mitigated strength is such an agent, and its application causes an inflammation of the required intensity.

5. It, therefore, exercises a selective influence upon the tissues to which it is applied, and causes the death of the cancer cells in localities outside the apparent limits of the new growth, where there is as yet no evidence of disease.

6. It is superior, in suitable cases, to any method, knife or cautery, which requires the exercise of the surgeon's judgment as to the extent to which it is to be carried. That that judgment is often wrong, and neces-

sarily so, is shown by the frequency of recurrence under these methods, even in the best hands.

7. It is applicable to all cutaneous carcinomata in which the deeper structures are not involved, and which do not extend far onto the mucous membranes.

8. It is easy of application; it is safe; it is only moderately painful, and its results compare favorably with those obtained with other methods.

THE BACILLUS IN DIPHTHERIA.—Grigorieff (*Arch. de Med. des Enfants*, August, 1898) gives the following as the results of his investigations with regard to the persistence of the diphtheria bacillus in the mucous membranes of patients convalescent from diphtheria. In four fifths of the whole number (36 out of 46) the bacilli disappeared very quickly, namely, not later than a week after the disappearance of the membrane. In a tenth (5 out of 46) the bacilli disappeared during the second week. In a tenth of the whole number (5 in 46) the bacilli were found up to the end of the third week. Bacteriological examination of the nasal cavities showed that the bacilli disappeared about the same time, or nearly so, as in the throat. An exception to this rule was when the nose was more severely attacked, not always with the formation of membrane. The author's conclusion is that the bacilli disappear or lose their virulence very early—as a rule during the first two weeks. It must, however, be borne in mind that in some patients the bacilli remain much longer than the period mentioned, and the continued virulence of these has been demonstrated on animals. The author concludes that the time of isolation must not be regarded as a fixed period, but must depend entirely on repeated bacteriological examinations of the nose and throat. These are of the highest importance in children going to school or otherwise mixing with other children. In hospitals convalescents should, as much as possible, be kept apart from those patients who are in the acute stage of the disease. In addition to serum-therapy it is of the utmost importance to irrigate the throat, mouth, and nose until the patient can be pronounced cured.—*British Medical Journal*.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—The twenty-fifth annual meeting of the Mississippi Valley Medical Association will be held in Chicago, Tuesday, Wednesday, Thursday, and Friday, September 12, 13, 14, and 15, 1899.

It has been some twelve years since Chicago entertained a medical body of national importance, and the profession of the city, under the Chairmanship of Dr. Harold N. Moyer, is determined that this shall be a notable gathering in every respect. The Committee of Arrangements has in preparation a handsome souvenir booklet containing a history of medical Chicago, which will also be the program of the meeting. In honor of the Association there will be given, before and after the meeting, a series of clinics at the various colleges and hospitals, a full description of which will be contained in the booklet referred to.

Admirable arrangements have been made by the local committee for the places of meeting, both for the general sessions and the medical and surgical sections. The rooms of the Chicago Medical Society, which will be the headquarters before and after the meeting, for those who avail themselves of the clinics offered, and the Columbus Medical Library are very close to the place of meeting.

The annual addresses in Medicine and Surgery will be notable, delivered by prominent Mississippi Valley doctors, particulars of which will be announced at a later date.

In order that a place may be secured on the program, titles of papers must be sent early.

DUNCAN EVE, *President*,
NASHVILLE, TENN.

HENRY E. TULEY, *Secretary*,
LOUISVILLE, KY.

THE LOWER EDGE OF THE LIVER.—Pichler (*Centralbl. f. inn. Med.*, September 10, 1898) says that it is recognized that the enlarged liver may so bulge the abdominal wall as to be distinctly visible. He maintains, however, that the lower border of the liver, which is not enlarged, may also at times be seen. In observing Litten's diaphragm phenomenon, the author found it possible to see the shadow of the lower hepatic margin descend with inspiration and ascend with expiration when the individual was not too fat and the abdominal walls not too distended. The shadow can be recognized only on deep breathing. It is best seen in the right lobe of the liver, less clearly in the left. By changing the position of the patient, different parts may be brought into view. The position adopted in order to demonstrate Litten's phenomenon is the most suitable. Meteorism causes the shadow to disappear. There are two usual methods of ascertaining the lower border of the liver, the one by palpation, which is not always available, and the other by percussion, which is sometimes deceptive. The author says that this simple method of inspection has often sufficed when palpation was impossible, owing to tenderness. The limits of other organs may also produce shadows which move with respiration.—*British Medical Journal*.

A HOUSE EPIDEMIC OF SYPHILIS.—William S. Gottheil, M. D.: Thanks to a better knowledge of the dangers and modes of transmission of syphilis, and to superior habits of cleanliness, epidemics of the disease are rare in America; yet they occur among the lower classes of our population with greater frequency than is generally supposed. In the New York Medical Journal of March 26th the writer records one in which the disease was introduced into the family, according to the history, by vaccination, and in which every member of the family of eight was ultimately infected. The first case was a child of two years; then the mother, aged thirty-four; then two girls, aged nine and fourteen respectively; then a boy of four; then a girl of seven, and then a nurseling, aged six months. The father

escaped until the last; but late in the spring he came to the clinic with a characteristic eruption, alopecia, etc. The cases were all severe; there were several irities; all had obstinate and some very extensive mucous patches; and the two-year old child had a syphilitic pneumonia. The site of inoculation was discoverable in two cases only, probably on account of the lateness and irregularity with which the patients were brought to the clinic. In the mother it was upon the center of the cheek, and in one girl it was upon the eyelid. The family was very poor, living in one room, and their habits were very uncleanly.

LARGE FAMILIES AMONG THE POOR.—At an inquest held on December 2d by Dr. Wynn Westcott at Bethnal-green on the body of an infant found dead in bed, the mother of the deceased mentioned that she had fifteen children. The coroner remarked that he could not understand how it was that the poor managed to keep such large families, whereupon a juror remarked: "One or two don't make no difference. Some grow up and help to keep the others." After all, there may be more sound sense in this argument than might at first sight be supposed. Everyone who has any experience of work among poor people knows how kind the poor are in taking in an extra child for nothing very often, and sometimes for a small weekly payment. We do not, of course, refer to baby farmers, but as a matter of fact the charity of the poor to one another is above all praise, and so perhaps the large family may not be so undesirable after all. The great difficulty in connection with such is not so much clothing or feeding but proper house-room, and to find this with the exorbitant rents which are being daily demanded in London is almost impossible.—*Lancet*.

METHYLENE BLUE IN EPITHELIOMA.—M. Landrewie (*Gazette hebdomadaire de medecine et de chirurgie*, December 18, 1898), in a thesis before the faculty of Toulouse, after reviewing the various therapeutic applications of methylene blue, asserts that it possesses analgetic, antimalarial, and antiseptic properties. But he considers that it has a special action upon neoplastic tissues, which enables it in conjunction with curettage of the diseased parts to give durable cures in cases of cutaneous epithelioma, in which cases it should be preferred to less active measures. In recent cases it assures a rapid cure; in older cases, with extensive destruction, it should be preferred, he thinks, to extirpation with the knife, for it permits better limitation; while, where excision remains the method of election, it can still render useful aid as a preparatory treatment.—*New York Medical Journal*.

HEMORRHAGE AS A SIGN OF CONGENITAL SYPHILIS.—In the course of the description of a case of hemorrhagic congenital syphilis appearing as a hemorrhagic vesicular eruption, Dr. William S. Gottheil calls attention to the importance of otherwise unexplainable bleedings in infants as symp-

toms of congenital lues. They may be the only mark of the disease, especially at first, but they are almost invariably accompanied by a diminution of the coagulability of the blood, similar to that of hemophilia, and the case usually goes on rapidly to a fatal termination. Disease of the vesicular walls is one of the commonest and best known effects of the syphilitic poison, leading to hemorrhagic discharges from the mouth, the bowels, the bladder, or the nose; to blood accumulations under the skin and mucosæ, or in the serous cavities and internal organs; or finally making the syphilitic eruption itself hemorrhagic. The author emphasizes the importance of remembering these facts in the treatment of infants who have hemorrhagic discharges or a hemorrhagic eruption, the cause of which is obscure.—*Archives of Pediatrics*, June, 1898.

OPERATIVE TREATMENT OF EXOPHTHALMIC GOITRE.—Schwartz (*Bull. et Mem. de la Soc. de Chir., de Paris*, November 22, 1898) reports two cases of exophthalmic goitre treated by bilateral resection of the sympathetic nerve in the neck. In one patient, a woman aged twenty-three, the lower part of the superior ganglion on the right side, together with about two inches of the nerve trunk, was excised. This operation was at once repeated on the right side. In the second case the patient, a woman aged thirty-one, had suffered severely from attacks of angina pectoris. In this case, as there was considerable difficulty in exposing the sympathetic nerve on the right side, and the patient was very weak, it was thought well to defer the operation on the left side for a month. In both cases the operation, it is stated, gave much relief, and was followed at first by less marked prominence of the eyeballs and by reduced pulse frequency, and subsequently by a gradual amelioration of the general symptoms. The second patient was decidedly more benefited by the operation, as the distressing attacks of angina suddenly ceased after the sympathetic had been resected on both sides.—*British Medical Journal*.

INTUSSUSCEPTION TREATED BY LAPAROTOMY.—On August 13, 1898, a female infant, five months old, was admitted to the Leeds Infirmary with a history of pain in the abdomen, vomiting, and of passing blood-stained motions and some mucus. The child had only been ill for four days. On admission a sausage-shaped swelling could be felt in the region of the cecum and extending across the abdomen. On the afternoon of admission ether was administered and an incision about two and a half inches long was made in the middle line of the abdomen. On passing the hand into the abdomen an intussusception was felt and that part of the bowel was brought outside the abdomen. The intussuscepted part was found to be ileum into cecum and ascending colon. The intussusception was easily reduced and was then returned within the abdomen. The abdominal wound was closed. The patient was discharged well on September 6th.—*Dr. W. H. Brown, in the Lancet*.

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"NEC TENUI PENNĀ."

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No. 6

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

ANALYSIS OF THE EARLIEST MANIFESTATIONS OF TUBERCULOSIS.*

BY FRANK C. WILSON, M. D.

Professor of Chest Diseases and Physical Diagnosis, Hospital College of Medicine, Louisville, Ky.

The paramount importance of detecting the presence of the tubercle bacillus as soon as possible after its entrance into the system is conceded by all, and the prospect of successfully combating it will be just in proportion to the promptness and energy with which curative measures are instituted. Even the merest tyro in medicine can recognize a case of pulmonary tuberculosis in the third stage, when cavities present unmistakable physical signs. As far as the fate of the patient is concerned, its recognition makes very little difference. It is a much more difficult matter to recognize the disease in its very incipency, when perhaps there may be so few colonies present, involving so small an area, as to be scarcely recognizable by the most delicately trained physical senses. It will make an immense amount of difference in the results of treatment whether it be commenced in the first few weeks or months later.

Possibly by a careful study and analysis of the earliest manifestations of tuberculosis in its effects upon the various functions and organs of the body we can deduce some rules by which we may recognize the grouping of certain symptoms and signs as indicating the presence of tubercular deposits.

*Read before the Louisville Medico-Chirurgical Society, February 24, 1899. For discussion see p. 215.

Assuming as a fact now admitted by all that the tubercle bacillus is the essential cause of tuberculosis, let us study for a moment the changes and effects wrought by its presence in the tissues.

When the germ is carried by the inspiratory current of air into the bronchial tubes it lodges upon the walls of some one of the smaller tubes and at once entrenches itself and commences the development of a colony, multiplying with great rapidity. Nourishment can only be secured by absorption from the surrounding tissues, and this is impeded by the efforts of the defensive cells of the system in their contest with the invading germs. Every germ originates toxic products which, to a greater or less extent, poison the system in which it has acquired a habitat. The effect of this upon the system is to stimulate the multiplication of the leucocytes in those cells chargeable with defensive duties; and second, to increase the production of a material in the circulation which is antidotal to the poisonous emanation from the germs, and hence called antitoxin. As long as the production of this keeps pace with the introduction of the toxic material, the system is protected. But a limit is soon reached, and then the constitutional effects are manifested, such as fever, quickened pulse and respiration, loss of appetite and strength, lassitude, emaciation, nightsweats, etc.

The changes in the constitution of the blood produced by tuberculosis are exceedingly interesting. Grawitz noticed in the early stages a diminution of the red blood cells and their dry residue; later on the number of red cells almost normal; while in the advanced cases a diminution of all the constituent elements occurred.

To Dr. Charles Dennison and Dr. A. M. Holmes we are indebted for some very striking observations made in the study of the blood in a number of cases. Dr. Holmes concludes as follows: That in tuberculous blood there is abundant cell disintegration, premature development, premature decay, and more or less deviation from the normal percentages of the various types of cells. That if there is marked disintegration in the leucocytes, it is with absolute certainty that we can predict a similar condition in the larger organism. That tuberculosis possesses a combination of blood appearances from which a diagnosis may be made earlier than by any other means that we now possess. That these may be recognized under a high power even before the disease manifests itself in the individual. That they are sufficiently marked in tuberculous persons, or even in those with a strong tuberculous predisposition, to enable a diagnosis being made

from the blood alone, without knowledge of the history or physical condition. That the real source of recuperative power is to be found in the leucocytes. No other pathological condition has been found presenting similar appearances, and that if we expect to detect tuberculosis in its incipency we must study the leucocytes. Dr. Watkins describes a granular mass or corpuscle found in the blood in tuberculosis which he considers a pathological product and distinctive of the tuberculous process. Marfan observed that the arterial tension was lowered in phthisis, and the pulse becomes more frequent.

In obscure cases of tuberculosis persistent loss of flesh is a serious diagnostic symptom, and the relation of bodily weight to the height is of great importance. Robin noted that in the earlier period of tuberculosis the amount of urine tends to increase; in the second period the amount is less but still above normal. Indicanuria has also been found as a constant and permanent manifestation in tuberculosis. Tubercular bacilli have been detected in the urine precipitated by the centrifuge or by adding albumin and coagulating it, thus entangling the bacilli in the precipitate, and detected in the sediment by the microscope.

A sudden increase in the frequency of respiration, with dyspnea and cyanosis, when not attributable to filling of the bronchial tubes nor to pneumothorax nor to pleuritic effusion, points to the development of miliary tubercles in abundance.

Deficiency of chest expansion not only indicates the presence of a local morbid process, notably incipient tuberculosis, but it also indicates the lack of strength and muscular development; of physiological deficiencies rather than physical, and suggests clearly the need of pulmonary gymnastics. The spirometer, as made by Hutchinson or Dennison, will afford the best test as to the vital capacity of the chest. If the number of cubic inches of air inspired is much below the average, it will be strongly suggestive of tuberculosis or of a condition predisposing to it. Dennison's manometer will indicate the relative force of inspiration and expiration. The temperature range affords an early indication of tuberculosis.

If in a suspected case the temperature is found for a period of several weeks one half to one degree above normal in the afternoon, with occasional inverse temperature, other diseases being excluded, a diagnosis of incipient tuberculosis will most likely be confirmed by subsequent developments.

Destrée, of Brussels, has noticed that unequal dilatation of the pupil is frequently observed in unilateral tuberculosis, the greater dilatation corresponding to the affected side.

The pale and anemic complexion of the tuberculous subject is familiar to all, and is frequently seen even before marked physical signs can be discovered. The clubbing of the fingers is another familiar effect, the osteo-arthritis of Marie.

Efforts have been made to utilize the X-rays to discover tubercular deposits in the lungs, but not very successfully in the earlier stages. Large deposits can be easily shadowed, and the location of a cavity clearly made out, but the slight deposits can not be detected with reliable certainty.

Stubbert, at the Loomis Sanitarium in New York, reports a series of observations, and makes the following deductions:

(1) Slight haziness indicates the beginning of tubercular infiltration, and may or may not be accompanied by dullness.

(2) Decided shadows indicate consolidation.

(3) Circumscribed spots of bright reflex surrounded by narrow dark rings or located in the midst of dense shadow, indicates cavities.

For the purpose of local surgical or medical treatment of cavities, definitely locating them will be of essential service.

In estimating the gravity to be attached to slight physical signs, we must take into consideration the family history and environments of the patient. If the family history shows a strong inherited tendency to tuberculosis, or the environment suggests a possibility or a probability of infection, then much greater weight must be given to slight deviations from normal conditions. In appreciating the slighter changes and alterations in structure and function, it behooves us to bring to the aid of our physical senses—previously accurately trained—such instruments of precision as may enable us to more readily and certainly detect such changes. The growth and development of the tubercular colony in the lung tissue increases the proportion of solid material, and will therefore cause dullness upon percussion just in proportion to the amount of deposit. In the earlier stages it may be so slight as to be hardly appreciated except by a careful study of the changes in the pitch of the sound. If the patient is placed against a wooden door or partition which will act as a sounding-board, it will so amplify the sounds as to make appreciable very slight alterations. The vocal fremitus will also be slightly increased and the vocal resonance more

marked. The irritation due to the presence of the mass in the immediate neighborhood of a bronchus will lead to the development of a localized bronchitis with usual signs, dependent upon the narrowing of the caliber of the tubes or the pressure of mucus in them.

The microscopic examination of the expectoration should be carefully made, and if tubercular bacilli are found, the diagnosis will thus be confirmed. The negative evidence, as afforded by the microscope, becomes positive only in proportion to the frequency and care of the examinations.

Too often the physician is consulted only after the disease is far advanced, or if consulted earlier, by a superficial examination fails to detect the deposit and allows the opportunity for successfully treating the disease to pass, possibly forever.

LOUISVILLE.

TRAUMATIC NEUROSIS.

BY T. B. GREENLEY, M. D.

On December 23, 1897, at night, Mrs. L. was returning home from Louisville by the turnpike road, and when about four miles from home, in attempting to pass a wagon, it being very dark, ran over a pile of rocks or gravel on the side of the road and upset the carriage.

She was thrown violently out and received a cut on the right side of her forehead, about one and a half inches in length, reaching the bone. There was concussion of the brain, lungs, and kidneys. The wound was dressed soon after by the writer, and healed by first intention.

I saw her next day, when she was expectorating blood, and complained of pain in her head and back, and also in her right side over the chest. She was also passing bloody urine.

We used dry cups over the kidneys and gave her small doses of turpentine for the hematuria and hemoptysis. Also gave her sedatives for the cerebral neuralgia. Under this treatment she seemed to improve for a while, but occasionally the bleeding would return after the turpentine was left off. Her headache and pain over the kidneys continued, sometimes being quite severe.

Her appetite was very poor, eating but little. Her kidneys were very torpid, only acting once a day, passing about half a pint. This condition continued up to the 15th of January, when an accident occurred to her husband, which seemed to make her worse. Mr. L. was taken

to the Gray Street Infirmary, and his wife being lonely, my daughter had her brought to our house, where I attended her about eight weeks, seeing her some three times a day, and watching the symptoms closely.

Thinking her severe neuralgic pains of head and back were, to some extent, due to retained elements in the blood, uric acid, etc., which should be eliminated by the kidneys, I put her on carbonate of lithia three times a day. At night, in order to procure rest, I gave her a dose of some sedative, sometimes bromides with hyoscyamus, etc., sometimes antikamnia, etc., not wishing to keep her on the same thing too long at a time. I also used dry cups over the kidneys, which seemed to relieve the pain very much. I cupped her in this way nearly every night before she could go to sleep.

While endeavoring to excite gentle action of the kidneys with mild diuretics, I used extract of jaborandi to keep skin acting, and mild laxatives so as to relieve the kidneys as much as possible in their crippled condition. With all the diuretics I could think of I was unable to increase the function of the kidneys, there being only about half a pint of secretion daily, this being passed at one time.

I have used lithia, turpentine, acetate, bicarbonate, and nitrate of potash, pareira brava, buchu, juniper, and digitalis, but noticed no effect in any of them in the way of increasing the quantity of water. I only used digitalis after trying the other preparations. I delayed its use on account of slow action of the heart, which ranged from 60 to 68, owing to position. The digitalis had the effect in a few days, in small doses, to reduce its frequency to 50, when it was discontinued.

The urine, when clear of blood, had a specific gravity of 1020. I have found it, when examined, acid and clear of albumen. I found no tube casts or granular matter, and of course it contained no sugar, owing to its light weight.

May 22. Had Dr. Ed. Grant, of Louisville, to see her, in conjunction with Dr. Applegate and myself. On inquiry we found that she had not passed any water for more than two days, and on the morning we saw her jointly she passed about three ounces, which was bloody. Dr. G. took it to the city and had it analyzed. It was found to contain, after the blood was eliminated, albumen and uric acid. This analysis was made several weeks after my last examination, when it contained no albumen. However, the samples I examined were clear of blood.

The patient has, up to the present time, January, 1899, more than a year after receiving the injury, severe spells of frontal and lateral cere-

bral neuralgia. She also has deficient secretion of urine, which is still at times bloody. She also continues to suffer a great deal with pain in her back, over the region of the kidneys, and occasionally has an attack of hematemesis.

Turpentine still seems to be the best remedy, both for the bloody urine as well as that of expectoration. I omitted to mention corn-silk when speaking of diuretics. I also tried her on that, but, like all the rest, it had no effect. I used several tonics and alteratives, and think, perhaps, the normal liquid of nux vomica had the best effect, seeming to promote appetite and aid digestion.

It is astonishing how well she gets along under all the conditions with which she is affected. Her appetite, at times, is fairly good, and she seems to digest her food very well. Some days she sits up several hours at a time.

The husband of the patient sued the turnpike company for damages on account of injuries received by his wife. The writer was a witness for plaintiff, and gave a history of the case, together with the treatment up to the time of trial last summer. A judgment was allowed plaintiff for \$1,500.

In giving evidence, the writer was asked his opinion in regard to the future health of the patient. His answer was that if the function of the kidneys could not be restored, she would be a chronic invalid as long as she lives.

OREL, KY.

VARICOCELE.*

BY OSCAR E. BLOCH, A. M., M. D.
Assistant in Clinical Surgery, University of Louisville.

This is a condition characterized by the dilatation of the veins constituting the pampiniform plexus. It is a very common affection, occurring in ten per cent of all men, and is usually seen on the left side, rarely on the right; it is ordinarily single.

The left spermatic vein empties at right angle into the renal vein, and is longer than the right, which empties at an acute angle into the vena cava, and the loaded sigmoid flexure interfering with the flow of blood through the left spermatic vein are potent factors in the left side being the most frequent seat of varicocele.

*Read before the Practitioners' Club, Louisville.

It is found in young adults, and is very infrequent among the married; this fact would make marriage appear to effect a cure, and since most of the patients give a history of abuse of or lack of use of the sexual organs, this deduction seems logical. Hereditary influence, according to Lydston, of Chicago, plays a part in the causation of varicocele; he relates as an example a family, the mother of whom had very large varicose veins of leg; the father had venous nevi on both thighs, and the two sons had varicocele.

The varicosity of the spermatic vein gradually increasing does not attract the attention of the patient until it has attained its maximum. There is given to the touch a worm-like sensation peculiar to these enlarged veins, which once encountered is never forgotten.

More or less pain, penetrating in character and radiating from the scrotum, is felt; however, the physical symptoms do not compare with the mental, which are sometimes alarming; the patient is depressed, morose, and imaginative; he is dyspeptic and melancholic, and suffers with more or less cephalalgia. The testicle on the left side appears to be in a state of atrophy, being softer and smaller than its neighbor; this adds a fear of impotency to the patient's discomfort, while the idea of a complete atrophy puts him in agony, and his condition is most distressing.

The only thing that varicocele can be taken for is hernia; if the hernia is reducible there can be no error, whereas if the hernia is strangulated the symptoms will distinguish very readily between them. Treatment consists of palliative and curative. The palliative is indicated in all cases where the mental symptoms are not prominent; a properly fitting suspensory bandage, holding up the scrotum and supporting the veins, cold baths, especially cold water dashed upon scrotum and thighs; tonics should be given and constipation must be relieved.

If there are mental symptoms which can not be alleviated by the palliative treatment, then the curative is indicated. Cures for varicocele are as ancient as the disease. It used to be customary to inject a coagulant, such as Monsel's solution, into the spermatic vein at the inguinal ring; a truss fitting just closely enough to restrict the flow of blood through the vein was also one of the favorite methods of treatment, but these have been long since discarded, as has, almost, the subcutaneous ligature which was so lauded by Keyes.

The open method is now used with but little danger of phlebitis, which used to follow this operation by the old surgeons and caused

death. Since the principles of aseptic surgery have been introduced, this operation rarely results unfavorably, and is classed as a minor operation.

It is useless to go over the preparation of the patient and the steps of an operation with which all are familiar, but I want to call your attention to a method of suturing the scrotum which I first saw done by Prof. W. O. Roberts, and struck me as being very clever. The inferior angle of the wound reaching from the inguinal ring to the lower part of the scrotum is sutured to the superior angle, and the incision becomes transverse instead of longitudinal, thus shortening the scrotum and making ablation unnecessary. The patient must be kept in bed two weeks until all possibility of a phlebitis is removed. There will be a thickened spot where the veins were ligated for several months. I have had nothing but uniform success in this operation.

At the January meeting of this club I asked the opinion of the members about a patient who had varicocele. This patient had been suffering with pain; there was a beginning softening and atrophy of the testicle. A suspensory bandage with internal treatment failed to relieve him. He suffered from indigestion, was pale and despondent, got no pleasure out of life, and was out of sorts generally. The club was divided in opinion, some advising operation, some not. He was operated upon January 12th, the day following the meeting of the club. I am more than happy to report the perfect success of the operation. His digestion is improved, his melancholia has disappeared, and he is well to all intents and purposes.

Another patient upon whom I have recently operated had submitted to operation under cocaine by a country surgeon, who evidently was satisfied with an incision into the scrotum without ligating the vein. The resulting adhesions made the operation more than ordinarily difficult, but the recovery was perfect with complete abatement of symptoms of which patient had complained some months, to wit: Pain in abdomen and thigh, indigestion and melancholia.

LOUISVILLE.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, February 24, 1899, the President, Thomas Hunt Stucky, M. D.,
in the chair.

Intubation in an Adult. Dr. Thos. C. Evans: Last Monday night I was called hurriedly to see a woman, I presume forty years of age, the telephone message stating that she was choking to death. I went as rapidly as possible and found the report had not been exaggerated. Suffocation seemed imminent. Examination of the throat without the laryngoscopic mirror showed entire absence of the soft palate, and considerable of the hard palate was gone, evidently the result of syphilitic ulceration. Examination with the mirror showed an old cicatrix in the larynx, with a recent ulceration. In the recent ulceration there was quite a large growth of granulation tissue looking something like a sponge or cauliflower protruding into the already contracted chink from the old cicatrix. I told the woman there was only one or two things to be thought of, viz: An intubation; or, failing in this, a tracheotomy. She was sent to the Kentucky University Infirmary and every preparation made to do a tracheotomy in the event I was not successful in introducing the intubation tube. I tried first a middle size O'Dwyer adult tube, but could not force this through the constriction due to the old cicatrix. I then took the smaller size, and after some difficulty and very considerable amount of force, I succeeded in passing the tube through the stricture, and she was immediately relieved so far as the dyspnea was concerned. She said little or no pain was experienced while the tube was being introduced. I believe that she was so far gone in the process of asphyxiation that her sensibilities were more or less obtunded. I applied cocaine to the larynx before introducing the tube. She rested very well that night and had a fairly good night's sleep. The next morning she complained of pain and soreness about the muscles which run from the larynx to the styloid process; also pain in her ear. Now we all know that the question of feeding intubated cases is serious enough, but in this case the rules that work in ordinary intubated cases would not work at all. We

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

usually say we can make the patient nourish by sucking liquid nourishment through a glass tube or a straw, or we can make them swallow very well by placing them in proper position—either letting them lie directly on the back or on the belly, with the head lower than the body—forcing the fluid uphill in this way, and the few drops which get into the tube would come out by gravitation. This woman had no power of deglutition left, as the soft palate was gone, with a large ulceration into the posterior wall of the pharynx. Since the intubation she has been nourished entirely by the stomach tube. She tolerates this well. Up to this morning she was doing nicely. Night before last she had a chill and developed temperature of 104° F. This was only temporary, and what the cause of it was I do not know. I think she will recover so far as the immediate effects of the operation are concerned. She was very much emaciated and run down generally, from the fact that she had not been able to nourish well for two years; neither had she been able to get a sufficient amount of air for two years. She had been hoarse all the time, and has suffered with dyspnea when she took any unusual exertion, such as going up steps, etc. As to how long this tube is going to remain *in situ* I do not know; I do not know how long it ought to remain. I am not inclined to take it out yet, and will leave it several days, and shall then probably try to introduce the next larger size when the present tube is removed. I think intubation is always preferable to tracheotomy in these cases, and the only reason I hesitated was that I thought I might not succeed, which, of course, would increase the dyspnea on account of the trauma that would necessarily be inflicted. A tracheotomy would not, under any circumstances, relieve the stricture of the larynx, and you would either have to divulse it with a divulser or introduce an intubation tube later.

Discussion. Dr. S. G. Dabney: The case is unquestionably one of syphilitic ulceration of the larynx. I think under the administration of iodide of potassium the infiltration will somewhat subside, when the tube may be removed and the woman will do well. It is astonishing to what extent the larynx may be reduced in its caliber and the patient still be able to breathe. I remember the case of a young woman who had a syphilitic ulceration of the throat, where the opening in the larynx was not as large as a lead pencil, yet she breathed fairly well. She finally died of exhaustion. I think in Dr. Evans' case that retention of the tube may be kept up long enough to allow the iodide of potassium to absorb the syphilitic deposit.

Dr. T. C. Evans: I neglected to say in reporting the case that one of the difficulties about introduction of the intubation tube was that a large part—at least three quarters—of the epiglottis was destroyed by the ulceration. Those of you who have practiced intubation know that the epiglottis is the principal landmark, and when it is gone we are sometimes at a loss to proceed. This added somewhat to the difficulties encountered. As to the suggestion of Dr. Dabney, the patient is getting a teaspoonful of the saturated solution of iodide of potassium three times a day. I have no faith in the absorption of a syphilitic deposit about the throat by the administration of iodide of potassium. Of course, after a cicatrix has once occurred, iodide of potassium has no effect upon it. The recent ulceration will probably be influenced in healing under the administration of iodide of potassium.

Dr. H. A. Cottell: This patient presented himself at the neurological clinic of the University of Louisville on January 27, 1899, with the following history:

W. B., aged thirty years, married; born in Indiana; by occupation is a carpenter; he now lives in New Albany. "His family history is good, and his previous history presented nothing unusual. Had measles in childhood, gonorrhea about eight years ago. September 1, 1898, he was wounded in the right arm, left arm, on the anterior aspect of the thorax, and also in the right leg, by a charge of birdshot No. 5. He was standing at a distance of twenty-five yards from the gun. Immediately after this, or on the second day, as he gives the history, his left arm and leg became paralyzed. His head was drawn to the right side. He had always been a healthy man, and there was no history of specificity in the case. He never suffered from any nervous trouble. He is a man of temperate habits; no alcoholic excesses. He said that his speech was somewhat affected; possibly he was aphasic; he shows no sign of this now. Has been treated by static electricity for over two months with some improvement."

This is his history up to the time he presented at the clinic on the 27th of January last. The history is peculiar in the rapidity with which the symptoms seem to have developed. You will find now that he has some wrist-drop, a paretic condition of the muscles of the forearm, involving the posterior interosseus and musculo-spiral distribution. When he came to me he could not raise his left arm. Under treatment he has improved considerably. His left leg is also paretic.

There is nothing particularly the matter with the right leg. The patellar tendon reflex on the right side is about normal, and that of the left side is markedly exaggerated. It was more so when he first presented at the clinic than it is now. There is also some ankle clonus on the left side, but nothing of this can be elicited on the right side.

Could the trouble be due to trauma from the shot? This would not seem possible. Of course we can account for the wrist-drop by direct injury to the nerves; but how are we going to account for the involvement of the motor tracts as indicated by this exaggerated patellar tendon reflex and ankle clonus on the left side? If there is an ascending degenerative process involving the motor tracts of the cord, it could not have developed rapidly as the patient states. The theory of the physician who previously attended him (a homeopathist) is, according to the patient, lead poisoning. There are some shot in the anterior surface of the body; none went deeper than the subcutaneous connective tissue. I do not believe the posterior interosseus nerve was wounded by any of these shot going into the upper part of the forearm; certainly none of them struck so as to involve the brachial plexus, and I do not believe trauma can account for the condition of the patient. The theory of metallic poisoning has little to support it. I am not satisfied with any hypothesis that can be brought forward to account for the symptoms. The case is puzzling if the history be correct.

Discussion. Dr. A. M. Vance: It seems to me that this paresis extends up to the face, and from all the appearances I am inclined to believe that this shot, traumatism, and lead poisoning are simply coincidental with a case of hemorrhage in the right side of the brain—ordinary hemiplegia. Certainly without the history of the shooting, without the possibility of these little shot producing lead poisoning, which is certainly very remote—and I do not know that such a case has ever been recorded in medical literature—we would take this to be an ordinary case of hemiplegia. I am inclined to think this is true, and that the other history is merely coincidental. I would call it hemiplegia, probably specific in origin. I would be inclined to accept this hypothesis and leave out the shot. I do not believe, even if he had a handful of shot in the forearm, that there would be enough lead to produce the symptoms present. If one of the shot had entered the eye of the right side, I would then think that the traumatism might have something to do with it, but there seems to be no such history; no shot seems to have

gone in above the clavicle, and none have penetrated deeply. Certainly no injury to any large nerve or the spinal cord has been produced by these shot.

Dr. T. S. Bullock: I would suggest that there is rather a strong probability of the so-called gonorrhea being a urethral lesion of syphilis. This may account for the history given by the patient. Certainly this is the most reasonable solution of the matter. We know that an enormous amount of lead has been left, and has remained in the system for years without removal, and no lead poisoning has been produced thereby. I have never heard of a case of lead poisoning due to lead retained in the body. I would suggest that what the man supposed was gonorrhea was probably a concealed syphilitic lesion. He states that the discharge from his penis continued for two months.

Dr. Wm. Bailey: I am inclined to the view expressed by Dr. Vance, that the symptoms are simply coincidental with the lead introduction. If it was lead poisoning, I do not believe it could come from such introduction of lead. I believe the shot would be encysted and so surrounded that there would practically be no absorption. Sometimes shot, after remaining in the body for a long time, may be removed and show almost no evidence of oxidation, and in this case I doubt very much the possibility of the symptoms being produced by the shot. Cases of one-sided wrist-drop have been reported, and I think it is claimed by the authorities that in those cases it has resulted from the handling of lead by that hand more particularly than by the other, being a direct influence by local absorption. I hardly see how there could be a wrist-drop in this case affecting a certain group of muscles which he describes coming on four days after the injury from the effect of the lead introduced as stated. I doubt the lead theory, and think the case is more thoroughly explained upon the supposition of either specific poisoning or rupture of a blood-vessel on the right side, giving us left-sided paralysis.

Dr. H. A. Cottell: I was not satisfied myself with any hypothesis that I had been able to make or that had been made by the physician who saw him previous to the time he came to the clinic. It seemed to me that the theory of metallic poisoning had more to support it than trauma, but I could not be satisfied with that by any means.

Of course we can go out and bring in conditions which do not appear in the history. We might suppose that the man has had hemiplegia, which is the easiest way to account for the symptoms, but

there is no such history. We might suppose that there was a specific history, but that was denied. So I consider the case still a puzzle.

The paper of the evening, "Analysis of the Earliest Manifestations of Tuberculosis," was read by Frank C. Wilson, M. D. [See page 201].

Discussion. Dr. H. A. Cottell: With reference to the negative results of examinations for the tubercle bacillus, I would say a word. In the great majority of cases of tuberculosis, even in early stages, we find the bacillus in the first examination; but I have once or twice, when all the physical signs were present, when there could not possibly be any doubt about the patient's suffering from advanced tuberculosis of the lung, been unable to find the bacillus after repeated examinations. I have in mind a case which I treated some twelve years ago, a patient who had hemaptosis and a great deal of mucous expectoration, and who finally died from sepsis and hemaptosis combined. In that case I made five or six examinations of different specimens of the sputum before I could find any tubercle bacilli. When there is a great deal of bronchorrhea the sputum is very much diluted, and it may be necessary to make quite a number of cover glass preparations and go over them with great care before you attach much importance to a negative finding.

I was particularly struck with the negative result, the absence of tubercle bacilli, in a case that Dr. Ray will recall, a patient I sent him two weeks ago. A diagnosis, from a laryngoscopic examination, of tuberculosis of the larynx was made. Two or three other specialists had looked at the patient's throat, and I believe they were all of the same opinion, and yet two examinations of two separate specimens of the sputum elicited only negative results. Notwithstanding the appearance of tuberculosis about the pharynx and larynx, no bacilli could be found in the sputum. On the other hand, we may have a few bacilli present in sputum by accident, and no corresponding lesion. We all have breathed germ-laden air. I have in mind a medical gentleman whose wife died of tuberculosis. He soon afterward became anxious about his health and had his sputum examined. Some tubercle bacilli were found, but as no tuberculous symptoms subsequently developed I judge they were accidental.

Dr. J. M. Ray: I am reminded of a case I had early in my professional career; a very large, healthy-looking specimen of physical manhood consulted me about loss of voice, and on examination I found

some infiltration of the arytenoids. That man died inside of six weeks from acute tuberculosis.

With reference to the throat symptoms in the diagnosis of tuberculosis: I presume all throat men are now in accord that the throat manifestation is not the primary condition; that it follows tubercular deposits lower down in the respiratory passages.

I recall the case referred to by Dr. Cottell, a woman whom I saw a few weeks ago. She had well-marked club-fingers, and the history pointed to tuberculosis. Her father died of tuberculosis. She was in good physical condition, yet the condition of the larynx was as nearly typical of tuberculosis as I ever saw. I left town soon after seeing her, and understand since that time she has been examined by several other gentlemen, who found no evidence of tuberculosis. I gave her a prescription of iodoform and orthoform. I understand that after she used this, all pain and other symptoms disappeared, although at least one third of the epiglottis is gone. Dr. Cottell notified me that he found no tubercle bacilli in her sputum.

Since that time I have seen another case, a woman of good physical appearance who has been hoarse all winter. Examination of the throat disclosed a decided pear-shaped infiltration or edema of both arytenoids; one false cord was very much thickened, but there was no ulceration present. In this case there is no family history of tuberculosis; the woman has been hoarse ever since early in the fall; a number of examinations of her sputum failed to find the tubercle bacillus, and yet the appearance of the larynx, the length of time the hoarseness has continued, etc., are strongly suggestive. The physician in this case failed to detect any lung trouble.

I have seen a number of cases in which the local appearances were very decidedly those of tuberculosis, yet an examination of the sputum has failed to discover any tubercle bacilli. I think to a certain extent this may be due to the fact that the specimens examined were made up largely of saliva, simply what the patient spit out of the mouth. If some of the secretion were obtained from the larynx and that examined, they would be much more liable to find the tubercle bacilli than from the ordinary expectoration coughed up under such circumstances.

In all suspected cases I would suggest that a piece of absorbent cotton be wrapped on laryngeal forceps and passed into the larynx, the larynx swabbed out, and the specimen thus obtained examined; in this

way, if the tubercle bacilli be present, they will be detected. The trouble has been in the past that secretion is not obtained directly from the larynx, and therefore the examiner has failed to find the bacillus.

Dr. S. G. Dabney: I think we throat men have all had experiences such as Dr. Ray has described. I have seen several cases where physical examination of the lungs and examination of the sputum gave no evidence of tuberculosis, yet the appearance of the throat was characteristic, and I felt morally certain of the existence of this disease. As an illustration I may mention the case of a woman who came to see me in November last in the sixth or seventh month of pregnancy. She had the typical arytenoid swelling, but there was no ulceration at that time. The epiglottis was not involved. I sent her to the family physician, asking him to examine her chest, telling him I felt almost sure she had tuberculosis. He could find no evidence of it. I then sent her to a well-known microscopist in the city for the sputum to be examined again, and he could find no evidence of tuberculosis. I could not doubt the diagnosis, however, because we who are in the habit of looking into the larynx in such a condition know how typical the appearance is. There is hardly any thing that can reasonably be mistaken for it. I saw no more of the patient. After a month or two she consulted Dr. Pelle, who had seen her previously, and he thought at that time he found some slight evidences of tuberculosis in a physical examination of the lungs. He sent a specimen of the sputum to another microscopist, who told him after repeated searching he found a few tubercle bacilli, but it was only after careful and repeated tests. It is interesting to note that this woman's condition remained almost the same up to the birth of her child, then she changed rapidly for the worse, and I saw a notice of her death in the paper a few days ago.

Orthoform is one of the coming drugs; I think there is something in it; it is very effective where there is a broken surface. I use it even in the later stages of this disease with excellent effect. It may be used either in powder like iodoform, or in twenty-per-cent solution with oil. I have recently seen a lady who was slightly burned about the lids and ears, and she found that orthoform in twenty-per-cent ointment with vaseline relieved the pain almost immediately.

The cases are not rare in which we can make a pretty certain diagnosis of tuberculosis from the local symptoms in the throat. I saw a young lady illustrating this for the first time yesterday. She is a delicate-

looking blonde of twenty-three. She is rather thin, although strong. She has almost no pain about the throat; she has considerable cough, but no night sweats. I have not taken her temperature, which, perhaps, I should have done. But I looked into her throat and found that the upper edge of the epiglottis had that well-known worm-eaten appearance characteristic of tuberculosis, and then deep down in the posterior wall of the larynx was observed a similar appearance. Of course syphilis has to be considered in such conditions, but taking into account the girl's appearance, with the character of the ulcerated surface, I feel certain that it is a case of tuberculosis.

I can not refrain on this occasion from saying something about a case which has been greatly in my mind recently, as the case bears out not only the local evidence but a great deal that has been mentioned in the discussion to-night. When in Virginia last fall I found a friend had an inflammation of the ear of a type very suggestive of tuberculosis. He had an extensive destruction of the drum membrane, with very little pus discharge, and with no pain. He had a great deal of deafness. He was profoundly anemic. He has had very few relatives who had a suspicion of tuberculosis. From the gross appearance of his ear, the extensive destruction of the drum membrane, and the painlessness of it, and incidentally the rather pale appearance of the mucous membrane, in conjunction with the very decided anemia and malnutrition, I advised him to consult Osler, of Baltimore, as soon as possible. He went to see Osler, who made an examination of the blood, finding it greatly reduced in red corpuscles, but he said nothing about any characteristic changes in the blood as indicative of the diagnosis of tuberculosis. He sent the patient to Aiken, where he has not done well, and from there he went to Asheville last week. His gastric symptoms are the most prominent. He is a man forty-five years old who has acquired tuberculosis without any distinct family history, and whose health had been reasonably good before. An interesting feature is that the most prominent symptom is great disturbance of digestion. He has very little involvement of the lung.

I refer to the ear and the throat symptoms as being local evidences that are sometimes very strong *prima facie* suppositions of tuberculosis.

Dr. Wm. Bailey: I would call attention to the importance of the paper in its relation to the necessity of getting hold of the patient in the earliest possible stages of tuberculosis; I would call attention to the fact

that we sometimes confuse diathesis with cachexia; this pre-tuberculous condition that is mentioned is probably what we inherit from tuberculous parents, which makes really only a predisposition, and whether or not I should spring the question that all consumptives are not what Dr. Dabney styled in his remarks acquired consumptives. I doubt if people can inherit consumption; they inherit a predisposition, and because of that predisposition they become subjects of the disease, as we are all exposed to the same causes as they are, and it is only in the lowered vitality, the lessened resistance of these patients, the diathesis, their resistance being still further lessened by unfavorable influences, by surroundings, by environments, etc., that the implantation or successive culture growth of the bacilli can take place.

I take it that in this country at least we are all more or less exposed to the germs of tuberculosis, and as to the recognition of tubercle bacilli in the sputum of healthy people, I think that must be very common. I doubt if you could strain out, so to speak, the atmosphere of any public assembly of Louisville without finding tubercle bacilli, and more particularly in apartments that have been occupied by tuberculous patients where the sputum has been allowed to dry and has been brought up into the atmosphere in connection with dust, etc. The opportunities are favorable all the time for contracting the disease, and I would say that all cases of consumption are in that sense acquired; but we do not acquire it unless our resistance is lessened, as a rule. I take it what we inherit is a predisposition, and it is well enough to be able to recognize that such a history, with disturbance of the nutritive forces, enables us to suspect these cases sooner in the feeble than we would in the strong.

I want to confirm what has been said about finding the tubercle bacilli in the urine. I do not believe the tubercle bacillus is ever found in any of the normal secretions of any animal. I do not believe the tubercle bacillus is ever found in milk unless there is disease of the udder or teat of the cow, or it gets into the milk by some other means. I do not believe that any animal makes secretions when in a normal condition containing tubercle bacilli; the bacilli are only found in the secretions when they have come in contact with local lesions of the disease. I do not believe there is any such thing as a cow with tuberculosis of the lung giving milk with tubercle bacilli in it. Nor do I believe without involvement of the kidneys or urinary tract somewhere that you will find tubercle bacilli in the urine. That is my present

conviction. I may change it, as I have often done in other matters, but at present I see no reason for doing so.

I realize the importance of Dr. Wilson's paper, but it requires a man of such earnest, close, constant attention in examination to determine, as early as we ought and as we know he is capable of doing, whether or not a patient is suffering from tuberculosis in the earliest stages. I think all the influences possible ought to be brought to bear in these cases, because whatever is accomplished is more successfully accomplished in the very early stages of the disease, as far as treatment is concerned.

Dr. T. C. Evans: In regard to the voice in the early stages of tuberculosis, I think there is something characteristic about it. I am not speaking particularly of tuberculosis of the larynx. Patients have a peculiarity of voice, there are certain changes in the voice, although there seems to be no inflammation, and so far as we are able to make out there is no paresis of the vocal cords; the larynx to all appearances looks normal, perhaps a little anemic, but outside of that its appearance is normal. Why we have these voice changes, which are characteristic in many cases, I am unable to say; but I have repeatedly had patients sent to me by the general practitioner for examination of the larynx to see if there was not some evidence of tuberculosis, and I would find the larynx normal with the exceptions I have noted.

Dr. F. C. Wilson: I only wish to say in closing that I did not mean to indicate that the presence of indican in the urine was pathognomonic of tuberculosis; you know it is present in many other conditions; but it is simply one of the symptoms when grouped together with others which would enable us to make an early diagnosis.

As to the voice: I have noticed these changes in examining cases of tuberculous laryngitis; I have frequently noted that the patient will lose control of the voice; he will attempt to speak, then the voice will run off the track, so to say, and the character of the voice seems to me to be peculiar to these cases. What the mechanism is, whether it is one of inco-ordination, or whether it is simply an exhaustion of the nerve stimulus that tends to control the voice, is a question. But I have often noticed that peculiarity, and have described it as simply a voice which runs off the track. The patient will speak along in an ordinary tone of voice, then suddenly it will run up entirely out of his control.

LOUIS FRANK, M. D., *Secretary.*

Reviews and Bibliography.

The American Year-Book of Medicine and Surgery. Being a Yearly Digest of Scientific Progress and Authoritative Opinion in All Branches of Medicine and Surgery, drawn from Journals, Monographs, and Text-Books of the Leading American and Foreign Authors and Investigators, Collected and Arranged with Critical Editorial Comments. By Drs. Samuel W. Abbott, John J. Abel, J. M. Baldy, Charles H. Burnett, Archibald Church, J. Chalmers DaCosta, W. A. Neuman Dorland, Louis A. Duhring, D. L. Edsall, Virgil P. Gibney, Henry A. Griffin, John Guiteras, C. A. Homann, Alfred Hand, jr., Howard F. Hansell, Milton B. Hartzell, Barton Cooke Hirst, E. Fletcher Ingals, Wyatt Johnston, W. W. Keen, Henry G. Ohls, Wendell Reber, David Riesman, Louis Starr, Alfred Stengel, G. N. Stewart, J. R. Tillinghast, J. Hilton Waterman. Under the General Editorial Charge of GEORGE M. GOULD, M. D. Illustrated. 1102 pp. Price, cloth, \$6.50; half-russia, \$7.50.

In his preface to this issue of the Year-Book, Dr. Gould says: "The most important change to be noted is the omission from the list of contributors of the name of Dr. William Pepper. Thus again is emphasized the fact that as we look back upon the remarkable influence of this man, the institutions and movements founded, inspired or supported by his inexhaustible energy and wonderful versatility seem to be almost numberless."

The Year-Book, as little as it might have last year seemed possible, is still a decided improvement. The selected kernels of medical and surgical literature have been better assorted and more suitably arranged, and any criticism of what is presented must yet be a criticism of the world's best.

There are but few instances of startling progress noted in the medical history of the year, though a general widening of knowledge and a firmer grasp of what has been approved by experience.

It seems that attention is still being given to the Woodbridge treatment of typhoid fever, which is rather less creditable to the good judgment of the writers than if the psychologists among them had been considering the treatment of Woodbridge.

H. A. Hare gets in a word in the way of doubt as to the great superiority of the Brand method over all others.

The serum treatment of diphtheria has well sustained itself, though even yet we do not know, perhaps, just what might be the result of treating diphtheria without medicine. In Louisville we have had this season and have now anywhere from two hundred to four hundred cases of smallpox without a single death. With such results, what a wonderful reputation would have been gained for any new line of treatment that might have been employed. Without doubt the serum treatment has accomplished much, but the exact status must yet be determined. A great deal of work is reported in connection with other antitoxins.

An interesting contribution is that of Weir Mitchell, on the psychoneuroses, in which he says: "In no case seen by me have ablation of the ovaries and termination of menstruation cured epilepsy." Another, also, by Charles K. Mills, who says: "I am inclined to make the assertion that in no case were real epilepsy, and real hysteria, or real melancholia ever caused by pelvic disease."

J. M. Mathews gets an extensive hearing on treatment of cancer of the rectum, in which his well-known conservative and humane views are advanced. It is to be hoped that such views will finally prevail, to shut off the desperate and hopeless operations too often done, unless, indeed, with a view to the speedy relief of the unfortunate patient from that as well as all other troubles.

But we dwell too long. It remains only to say that this work is a continuing wonder of industry, good judgment, and enterprise, and a work that it is a pity any physician should find himself so situated as to be compelled to deny himself.

In connection with the Philadelphia Medical Journal, which now represents more, if one might not say better work than any other medical journal in the world, Dr. Gould must by another year find his task an easier one.

D. T. S.

The Practice of Obstetrics. By American Authors. Edited by CHARLES JEWETT, M. D., Professor of Obstetrics and Diseases of Children in the Long Island College Hospital, New York. Illustrated with four hundred and forty-one engravings, thirty-four of which are in colors, and twenty-two colored plates. 768 pp. Cloth, \$5.00; leather, \$6.00. New York and Philadelphia: Lea Brothers & Co. 1899.

For those physicians who have kept the run of teachers and writers on obstetrical questions it will be of interest to know the names of the collaborators in this volume. The list embraces the names of Drs. Elias Bartley, William W. Browning, Augustus H. Buckmaster, J. Chalmers Cameron, Henry Dwight Chapin, Edward P. Davis, Robert L. Dickinson, J. Clifton Edgar, James H. Etheridge, Allan McLane Hamilton, Fernand Henrotin, Charles Jewett, Walter P. Manton, Chauncey D. Palmer, Hunter Robb, Joshua M. Van Cott, Jr., Hiram N. Vineberg, J. Clarence Webster, and J. Whitridge Williams.

The first chapter, that on the part of the female anatomy directly concerned with reproduction, impresses on the reader a degree of prepossession that is calculated to make him a partial judge of the entire work.

Besides the great beauty of the illustrations and the concise, clear description, that give zest to the study of this chapter, is the assurance that in a most vivid way is brought before him the seat and direction of various disease processes connected with the puerperium.

The Physiology of Pregnancy, though a little confusing as embracing both the mother and the fetus under one head, is graphically brought out, the fine plates being especially helpful. The signs of pregnancy given are the classic ones, though in Dr. Dickinson's description of ballottement one

can not more than recognize the descriptions of that test usually given in text-books, which is due to his giving the leading rôle to external ballottement.

In the chapter on mechanism a couple of pages are given to the "Causes of the Onset of Labor," to wind up, as usual, with "we know nothing about it." The etiology of head presentation is dismissed by Dr. Jewett with great brevity, the whole matter being embraced in three lines: "The preponderance of vertex presentations is due mainly to adaptation of the fetal ovoid to the shape of the uterus, and in some degree to gravity, the cephalic being the heavier extremity of the fetus," which shows that the doctor must be very ill-satisfied with the explanations hitherto offered.

The reviewer would like also to criticize the explanation Dr. Buckmaster gives of rotation, but hopes the matter will be fully brought to his attention before another edition of this work is issued.

As to the prophylaxis of eclampsia, while there is scarcely a medicament recommended by Dr. Edgar that the writer would use under like conditions, yet the general course he would approve; especially would he commend the position that rapid manual dilatation should be resorted to only after the cervical canal is in a condition favorable for its safe performance. In the curative treatment he pins faith mostly to veratrum viride, with which some have worked wonders and others accomplished nothing. What we need in these cases of exceeding doubtful therapeutics is honest statistics of cases treated under a single plan, so that the statistics will be of some value, and no man's opinion. Of opinions we have had a superabundance.

As space forbids pursuing the subject further, it remains to be said that the work has many and great excellences, but is not without faults and shortcomings. For a work of its scope there hardly seems need of so many writers in collaboration if the best presentation of the subject alone is aimed at. The favorite older writers have mostly passed away, and the field must from this on be occupied by new authors, but it will doubtless be some time yet before the perfect work is written.

D. T. S.

Diet and Food. Considered in Relation to Strength and Power of Endurance, Training and Athletics. By ALEXANDER HAIG, M. A., M. D., Oxon, F. R. C. P., Physician to the Metropolitan Hospital and the Royal Hospital for Children and Women. Author of "Uric Acid as a Factor in the Causation of Disease." 86 pp. Price, \$1.00; with five illustrations. London: J. A. Churchill; Philadelphia: P. Blakiston's Son & Co. 1898.

If one wished to learn how much one might be tormented by having his thoughts to dwell continuously on what part of his food is doing him discomfort, this is the book to read. If he has not uric acid in the blood he will have it on the brain. As said when reviewing Dr. Haig's "Uric Acid as a Factor in the Causation of Disease," it is good to have cranks, for they alone exhaust subjects, even if they do draw in a little that is extraneous.

In our own view, if one has so managed his diet that he begins each meal with a relish and wakes up after the night's sleep with a pleasant

taste in his mouth and a feeling of readiness for the day's task, he has come very near doing the right thing.

But the question as to whether a vegetable or animal diet is best is to be settled by actual tests under proper conditions.

It is not to be denied, however, that Dr. Haig's exhaustive work on uric acid has engaged thought in many countries, and this, too, will doubtless set many to thinking.

D. T. S.

Diseases of the Eye. A Hand-Book of Ophthalmic Practice, for Students and Practitioners. By G. E. DE SCHWEINITZ, A. M., M. D., Professor of Ophthalmology in the Jefferson Medical College; Professor of Diseases of the Eye in the Philadelphia Polyclinic, etc. With 255 illustrations and two chromo-lithographic plates. Third edition, thoroughly revised. 696 pp. Price, cloth, \$4.00; sheep or half-morocco, \$5.00, net. Philadelphia: W. B. Saunders. 1899.

While editing the American Text-Book on Diseases of the Eye, Nose, and Throat, Dr. de Schweinitz, with the whole field fresh in his mind, has also been preparing this third edition of his work on diseases of the eye.

In this edition special paragraphs on the following subjects appear for the first time: Favus of the eyelids, blepharo-cholosis, Koch-Weeks' bacillus conjunctivitis (acute contagious conjunctivitis, diplo-bacillus conjunctivitis, Parenaud's conjunctivitis), pneumococcus infection of the cornea, mixed infection of the cornea, oyster shucker's keratitis, fugacious periodic episcleritis, and several other important matters.

Besides being generally regarded as one of the very highest authorities on all matters relating to the eye, Dr. de Schweinitz has an exceedingly clear and expressive style that makes pleasant reading of the most difficult part of his subject. However, little more need be said of the work in the way of review than to state that a new edition is out. The profession does the rest.

D. T. S.

An American Text-Book of Diseases of the Eye, Ear, Nose, and Throat. Edited by G. E. DE SCHWEINITZ, A. M., M. D., Professor of Ophthalmology in the Jefferson Medical College, Philadelphia, etc., and B. ALEX. RANDALL, M. A., M. D., Ph. D., Clinical Professor of Diseases of the Ear in the University of Pennsylvania, etc. Illustrated with seven hundred and sixty-six engravings, fifty-nine of them in colors. 1251 pp. Price, cloth, \$7.00; sheep or half-morocco, \$8.00, net. Philadelphia: W. B. Saunders. 1899.

As one after another of these fine volumes appears from the press, the fact is more fully revealed that under the modest title of American text-books the profession is being offered a complete encyclopedia of medicine.

In the portion of this work devoted to the eye, its embryology, anatomy, histology, physiology, diseases, and injuries are discussed in twenty-four sections by twenty-four authors; its operative surgery in seven sections by as many authors, while certain practical details in the examination for color-blindness among railroad employes, etc., receive attention in an appendix containing five sections.

In the portion of the work devoted to the ear, its anatomy, physiology, diseases, and injuries are discussed in thirteen sections by fourteen authors, while diseases of the nose and throat are described in twenty sections by nineteen authors. Special articles on the standards of form and color-vision required in railway service, the Roentgen rays in ophthalmic surgery, the practice of ophthalmic operations on animals' eyes, the most important micro-organisms having etiological relationship to ocular disorders are features to be noted not usually found in text-books.

The practical side of the question is constantly brought into prominence. That among so many contributors there must be varying degrees of excellence goes without saying, or that so many are needed, except to commend the work through the attachments of students to their teachers in a wide range of institutions, can hardly be affirmed. But the accomplished editors in this case, a higher term than author, have seen to it that any shortcomings of this kind have been minimized to the utmost. The drawings are very distinct, and the mechanical work all well executed. D. T. S.

Saunders' Pocket Medical Formulary. With an Appendix. Containing Posological Table, Formulæ and Doses for Hypodermic Medication; Poisons and their Antidotes; Diameters of the Female Pelvis and Fetal Head; Obstetrical Table; Diet List for Various Diseases; Materials and Drugs Used in Antiseptic Surgery; Treatment of Asphyxia from Drowning; Surgical Remembrances; Tables of Incompatibles; Eruptive Fevers; Weights and Measures, etc. By WILLIAM M. POWELL, M. D., author of *Essentials of Diseases of Children*, etc. Fifth edition, thoroughly revised. 290 pp. Price, \$1.75.

This comprehensive formulary has been carefully revised, and presents many additional claims to popularity. Like all such works, it may be of immense help to the young physician if he does not lean on it to the exclusion of more extensive reference. There are very few physicians indeed who are not now and then, if not often, caught at a loss to know definitely what to do or what to give in emergencies. With such help he always has a resource until he can refresh his memory or gather information from more exhaustive authorities. The book is beautifully gotten up. D. T. S.

Holden's Human Osteology. Comprising a Description of the Bones, with Delineations of the Attachments of the Muscles, the General and Microscopic Structure of Bone and its Development. Edited by CHARLES STEWART, F. R. S., Conservator of the Royal College of Physicians and Surgeon of England; Hunterian Professor of Comparative Anatomy and Physiology, Royal College of Surgeons of England, and R. W. REID, M. D., F. R. C. S., Regius Professor of Anatomy in the University of Aberdeen. Eighth edition. 358 pp. Price, \$5.25. London: J. and A. Churchill. Philadelphia: P. Blakiston's Son & Co. 1899.

The editors have put forth this work with one of the shortest of prefaces, only saying that they have endeavored by a few alterations and additions to bring the work up to the present state of knowledge, and that since the work is one dealing essentially with human osteology, its comparative osteological portion has been least altered, since too much space would be required to do that part full justice.

Equally brief may be the review for a work that has become classical and reached its eight addition.

The student who would make a superior anatomist of himself needs to have a separate treatise on osteology as a matter even of economy of time and effort. The great works of Gray and Morris contain, it is true, more than any one is expected to learn, but the bones have so often to be referred to that even in connection with the treatises named a work like this with a full and connected treatment of them must needs be greatly helpful.

The author's genius for description is known wherever the English language is spoken, and the best skill in illustration has been invoked to complete the task of making what might be called a perfect work as far as concerns its department.

D. T. S.

A Manual of Physiology with Practical Exercises. By G. N. STEWART, M. A., D. Sc., M. D. (Edin), D. P. H. (Camb.), Professor of Physiology in the Western Reserve University, Cleveland, etc. With numerous illustrations, including five colored plates. Third edition. 848 pp. Price, \$3.75, net. Philadelphia: W. B. Saunders.

With the improvements that characterize this third edition of Stewart's Physiology it becomes a worthy competitor of the leading works, and for the great mass of students it offers strong claims to preference. While not so profound or so advanced as Landois or Foster, it is plain, clear, and concise, and for a text-book not surpassed.

Professor Stewart is well known as an original investigator; to this is to be added that he is a teacher of experience and success. He meets the controversy in regard to the rival claims of lectures and recitations by arranging the entire work so that the lecture-room keeps pace with the laboratory. As a teaching-book at least it is the equal of any other.

The author gives us his views at several points, or rather hints at the difficulty of having any views on the question of vitalism now being so warmly debated and earnestly investigated by biologists. He insists that "at the present time we possess no explanation of absorption which is more than a confession of ignorance and does not itself need to be explained." The letter-press and illustrations are in the habitually excellent and attractive style of the W. B. Saunders publishing house.

D. T. S.

Ocular Therapeutics. For Physicians and Students. By F. W. MAX OHLEMANN, M. D. (Minden, Germany), late Assistant Physician in the Ophthalmological Clinical Institute of the Royal Prussian University of Berlin. Translated and Edited by CHARLES A. OLIVER, A. M., M. D., University of Pennsylvania; one of the Attending Surgeons of the Will's Eye Hospital, etc. 274 pp. Price, \$1.75. Philadelphia: P. Blakiston's Son & Co. 1899.

It is a question whether the stereotyped title-page announcement, "for physicians and students," ought not to be changed. It seems to be rather a book for the practitioner to take up in order to refresh his mind on what he was taught while a student, and to familiarize himself with measures and methods of treatment.

The book begins with a consideration of mechanical treatment, referring in turn to massage, cold and warm applications of moisture, dry heat, the various chemical agents, and electricity. The various diseases of the eye are then gone over, and the treatment special to each is given.

In commenting on the therapy formerly in vogue, the author says: "We may know to-day that in inflammations, . . . above all cleanliness and asepsis are the fundamental conditions of proper ocular therapeutics." This is not the author's discovery, but it is something that myriads of doctors ought to discover, not only in ocular therapeutics but in therapeutics of all kinds. He might even have added cleanliness and asepsis without antiseptics, where this can be attained, for there probably does not exist an antiseptic that does not hinder healing.

In addition to his own experience the author gives frequent timely references to the practice in the various hospitals and by the leading ophthalmologists of Europe. The translation is surpassingly well done. The attractive type adds to the readableness of the book. D. T. S.

Manual of Clinical Chemistry. By ELIAS BARTLEY, B. S., M. D., Ph. G., Professor of Chemistry in the Long Island College Hospital, etc. Thirty-three illustrations. 150 pp. Price \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

In this small volume is offered the essentials of a chemical diagnosis or a description of all those chemical processes most useful to the practicing physician.

A manual giving necessary data for making all the analyses required by the physician in his practice, and containing the essentials of a suitable course of laboratory work for the student, and at the same time small, handy, and authoritative, is supplied by Dr. Bartley in this volume. It is largely printed from the same plates as the author's Text-book of Medical Chemistry, and is valuable principally from its convenience as compared with the handling of the larger work. D. T. S.

A Text-Book of Mechanico-Therapy (Massage and Medical Gymnastics). Especially Prepared for the Use of Medical Students and Trained Nurses. By AXEL GRAFSTROM, B. Sc., M. D., late Lieutenant in the Royal Swedish Army; late House Physician City Hospital, Blackwell's Island, New York. With eleven pen-and-ink sketches by the author. 139 pp. Price, \$1.00, net. Philadelphia: W. B. Saunders. 1899.

The system here presented is that practiced by the Royal Gymnastic Central Institute, Stockholm, Sweden.

It can hardly be denied that the practice of massage is entirely too much neglected. Undoubtedly it was the very first step in the practice of medicine. The first man who scratched a mosquito bite or rubbed a bee sting was practicing massage; and millions of hogsheads of liniments have owed nearly all their virtue to the fact that their application induced massage.

This little work sets forth the art in its most approved style, and offers a most satisfactory aid for those who contemplate engaging in it. D. T. S.

foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The Nurses' Association; A New Expedition; Lady Doctors; Influenza; British Medical Temperance Society; A Novel Defense; Treatment of Tuberculosis; An Early Public Analyst; Treatment of Epileptics; Health in the Navy.

The eleventh annual conversazione of the Royal British Nurses' Association has recently been held. The Association was founded in 1887 for the purposes of the improvement of the profession of nurses, of promoting their efficiency, and of assisting them by various benevolent schemes. The object of the annual gathering is to bring together the nurses of the various hospitals throughout the country and to promote good-fellowship among them. Many of the nurses wear the red and white armlet designed by the Princess of Wales, and indicating that they are members of the National Pension Fund. The company numbered about five hundred, and were provided with ample means of enjoyment.

A medical man fully provided with the necessary outfit has gone to West Africa to collect specimens of blood from those suffering from acute forms of fever in the hope of detecting the malarial parasite. Special attention will also be given to the mosquito theory of Dr. Manson. The expedition is expected to spend some eight months on the coast.

The increasing recognition accorded to lady doctors is shown by the fact that no fewer than twenty-one public or official appointments were bestowed upon qualified women last year. Among the important posts thus filled was that of medical examiner for defective children under the London School Board conferred upon Mrs. Berry, M. D., London, who had previously held an official post in the Alexandria Hospital for Hip Disease. At the Camberwell Infirmary there is a junior resident lady medical officer, and a similar appointment is held in the Chorlton Union Hospital near Manchester. Miss Christrie, M. D., was reappointed on plague duty in India, after having been for some time assistant medical officer at the Greenwich Infirmary, and is now working in Bombay in collaboration with another lady M. D. Four ladies holding distinguished diplomas are lecturers under the London School Board on Health and Hygiene, so it would appear that the profession of medicine is fast winning its way as a career for the sex, since forty-seven new students have entered the London School of Medicine for Women since the opening of its magnificent science laboratories by the Princess of Wales last summer.

Influenza is again firmly established in the British Islands. At the beginning of the year the number of deaths in the metropolis directly attributed to this malady was only about five per week, but latterly it has been increasing by leaps and bounds. Early in this month there were twenty-one, a fortnight ago they rose to fifty, and in the last seven days they reached the formidable total of seventy-four. In other respects the health of London is remarkably good. The general death-rate was 19.3. Brighton's was 16.5, Croydon's 15.5, and West Hams' 16.3.

At a meeting of the British Medical Temperance Association, Captain O'Gorman, of the Indian Medical Service, read an interesting address on the "Scientific Valuation of Alcohol in Health." Captain O'Gorman maintained that alcohol did not act as food; it was a protoplasmic or tissue poison, and did not retard waste; also that it was a nerve paralyzer and did not impart energy; neither did it conduce to longevity. The lecturer pointed out that the strength of the heart contraction was diminished by alcohol, and that it reduced vascular tension. It has been determined to publish the communication. Dr. Ridge said that at the present time there were about four hundred medical students in London who were abstainers and belonged to the Medical Temperance Association.

A doctor who was summoned at Portsmouth for riding a bicycle on the footpath raised a novel defense. He stated that there was an act of Parliament which gave a doctor permission to take the shortest cut when on his way to visit an urgent case. After an adjournment to allow him to produce the act, the magistrates decided in his favor.

The Southwark Guardians have resolved to call a conference of all the metropolitan boards with regard to concerted action being taken for the establishment of special institutions for the treatment of all cases of tuberculous disease. A letter was read from Sir Crichton Browne in which he pointed out our greatly increased knowledge of the nature of tuberculous disease, and its mode of propagation made it, in his opinion, obligatory upon those having the control of public institutions into which tuberculous patients are received to arrange for their complete separation from other inmates, and such a separation he considered to be especially necessary where there are other inmates in stages of debility predisposing them to contract tuberculous disease. It was stated that a third of the patients in the workhouse infirmaries throughout the kingdom suffered from tuberculosis, and that a large number of those cases which were hopeless could be cured by open-air treatment. The Nordrach system of treating consumption has been introduced into England at the North London Consumption Hospital at Hampstead. At present only a few beds are set aside for patients trying the cure, but should this attempt prove satisfactory the whole establishment will be adapted for the treatment.

Dr. Dyer, at the annual dinner of the Society of Public Analysts, said a great many people were under the impression that analysts were a recently established class of public functionaries, but Dr. Dyer pointed out

that Shakespeare was one of their remote predecessors. Of course he had not the elaborate equipment which they have in the present time; indeed, his only apparatus was a pair of leather breeches which he used in testing the quality of the beer vended in Stratford on Avon. The earliest analyst's methods were as primitive as his time. When he bought a quart of ale in his capacity as "ale-conner" to test its quality, there was no act of Parliament obliging him to say he bought it for the purpose of analysis, nor had he to divide it into three equal portions. He simply took the sample outside the inn, and, pouring it on a bench, sat down in the liquor. After sitting the prescribed period Mr. Shakespeare arose, and if the leather breeches stuck to the bench with appreciable adhesiveness it was held evidence of adulteration and the inkeeper was fined accordingly.

The London County Council have determined to provide at a cost of £66,000 a permanent building to accommodate three hundred epileptics in order to found a working colony for epileptics.

The returns of the health of the Navy for 1897 show a death-rate of only 5.23 per 1,000 or .05 lower than in the previous ten years. The rate of invaliding was 4.62 per 1,000 higher than 1896, mainly owing to the Benin campaign on the west coast of Africa, where much remittent fever was contracted.

LONDON, February, 1899.

Abstracts and Selections.

ERGOT IN CHRONIC MALARIA.—A. Jacobi (*Medical News*, October 22d), says that in connection with malaria there are two organs which have to be considered in the administration of medicines: the blood and the spleen, the former because it contains the sporozoa, the latter because of its sponge-like mass in which it harbors the infected blood and serves as a receptacle of dangers. It appears that a direct effect on the blood or on the plasmodia is not required for a cure, but that gradually the restoration of the spleen to a fairly normal size, forcing the stagnating blood into a normal circulation with progressive elimination of the plasmodia, is sufficient to open the gate to recovery. He gives ergot in the form of fluid extract (Squibb's), one teaspoonful in whisky and water four times a day. He gives details of several illustrative cases and formulates the following conclusions: (1) There are cases of chronic intermittent fevers with large tumefaction of the spleen that, after having resisted the action of quinine, arsenic, methylene blue, eucalyptus, and piperine, are benefited by ergot. (2) When enlargement of the spleen is not old and not firmly established, the contracting effect of ergot is noticed within a reasonable time. (3) The attacks will disappear before the diminution in the size of the spleen is very marked.

(4) Though temperatures, after the employment of ergot, remain irregular, and now and then somewhat elevated, rigors, as a rule, are not noticed with this elevation. (5) Plasmodia do not seem to disappear from the blood so rapidly as they do after quinine, when the latter is effective. But even while some are still present, the attacks being more or less under control, the patient will feel better. (6) Complicating local pain requires additional treatment with ice, or cold douches, or heat; chronic hyperplasia calls for iodide of potassium or iodide of iron. Digestive disorders may indicate, as they often do when quinine is expected to act, before the employment of ergot, an emetic, or a purgative, or stomachics. (7) An experience extending over forty years, in which he has used ergot in many instances, seems to Jacobi to justify in asserting at least this much: that there are many cases of chronic malaria, apparently intractable, that will get well with ergot. (8) There are cases occasionally in which the return of elevations of temperature after the successful use of ergot makes the combination of ergot and quinine, or ergot and arsenic, advisable, though quinine and arsenic had not been successful previously. (9) Ergot, like quinine, probably by its sudden contracting effect on the spleen, and by the forcing of large quantities of plasmodia-laden blood into the circulation, is, in chronic malaria, when hydremia and spleen tumor are excessive, capable of bringing on the very first attack of rigors and fever. (10) Recent cases of malaria have gotten better or were improved under the extensive use of ergot, but many resisted a long time; that is why acute cases should rather be treated with quinine.—*British Medical Journal*.

PROTECTIVE ACTION OF THE LIVER AGAINST MICROBES.—Roger (*Sém. Méd.*, October 19, 1898) describes his recent results on the subject (Paris Society of Biology). In 1897 he found that certain cultures of anthrax bacillus introduced into a branch of the portal vein did not kill rabbits, whereas cultures of the same virulence injected into other blood-vessels did cause death. He then found that the lungs possessed a protective action against the streptococcus, while the liver possessed none. The staphylococcus aureus grows rapidly in the brain, but, like the anthrax bacillus, is destroyed by the liver. The liver seems to be powerless against bacillus coli, and even to favor the growth of this microbe. Both liver and kidney arrest the growth of oïdium albicans. Recently Roger has made further experiments on rabbits to determine what conditions modify the protective action of the liver. This protective action is less marked when the animal is kept without food, but remains observable even after three days of fasting. If three fourths c. cm. of a sterilized culture of bacillus prodigiosus is injected into an intestinal vein, the liver loses all its protective power against staphylococcus aureus. Large doses of glucose—given by the mouth—weaken the protective power of the liver, whereas small doses increase it. The effect of ether is most striking; five drops of ether injected into the portal vein, or two c. cm. given by the mouth, abolish the protect-



ive action of the liver, whereas small doses by the mouth—two or three c. cm. of a solution of ether in alcohol and water—increase it. When the ether is injected subcutaneously its effect is much less marked. Perhaps the beneficial action of potions containing ether, in the case of patients with infectious diseases, may be explained on the supposition that dilute doses of ether given in this way increase the protective action of the hepatic cells against certain microbes.—*Ibid.*

BILATERAL ACUTE LABYRINTHITIS.—In the *Intercolonial Medical Journal of Australasia* of October 20th Dr. Percy Webster relates a case of this very rare disease. A healthy lad, aged ten years, one day looked pale and ill. He vomited, became delirious, and complained of pain in the head; he had to be held down in the bed. The acute delirium lasted eleven hours, after which he was quiet but lay muttering. He called out with pain when touched; moving the limbs seemed to cause great suffering. At times he would lie with his back arched and his head retracted. He was ill for about two months and became very thin. He had giddiness, and after his recovery staggered at times, especially in the dark. Deafness was noticed before he recovered from the delirium and remained permanent; it was total both for bone and aerial conduction. He complained of pain and constant buzzing in his ears. The fundi were normal, the knee-jerks were active, and there were neither ankle clonus nor paralysis. As the history was only obtained from his friends, it was impossible to say whether the labyrinthitis was primary or associated with meningitis, pneumonia, typhoid fever, or one of the exanthems, or whether it was secondary to otitis media.—*Lancet.*

THE APPENDAGES AFTER VAGINAL HYSTERECTOMY.—Van der Hoeven (*Centralbl. f. Gynäk.*, No. 35, 1898) considers that Brennecke relied upon pure theory when he asserted that the ovaries of necessity undergo atrophy after vaginal hysterectomy. As a rule, it appears, the tubes and ovaries seem to cause no trouble. After Pean's operation for pelvic abscess fistulous tracts may develop, but they heal spontaneously. Though the appendages may be absolutely healthy when the hysterectomy is performed, they sometimes become subject afterward to the disease for which that operation was undertaken. Hematosalpinx may develop, or even, as in Wendeler's case, tubal pregnancy. Several cases of serous cyst of the pelvis developing after vaginal hysterectomy or abdominal section have been reported. These records show, however, that they are not solely the result of the former operation. Van der Hoeven has described four such cases, three after vaginal hysterectomy, and these were respectively diagnosed as pre-ovarian cysts, ovarian cyst, and hydrosalpinx. The serous cysts were extirpated successfully. As a rule, operation is best, but hot irrigations are of benefit. The symptoms are pain and swelling, and also usually fever.—*British Medical Journal.*

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INTRAVENOUS INFUSION IN SHOCK AND HEMORRHAGE.

Dr. Daniel Fiske Jones, of Boston, Surgeon to Out-patients, Carney Hospital, contributes a valuable paper on this topic to the Boston Medical and Surgical Journal of February 9, 1899.

The author gives a brief resume of the history of transfusion, which has been practiced and abandoned from time to time since the time of Ovid, and shows why this dangerous procedure has been, it is to be hoped for good and all, set aside. Its place has been taken by the more recent and practically safe procedure call *infusion*, by which is meant the injection into the blood or subcutaneous cellular tissue of some fluid other than blood for the support and stimulation of the almost exsanguined patient.

Intravenous infusion was first practiced, so far as history records it, in 1677, when an attempt was made with milk as a medium, the experiment resulting in the death of the patient. While the practice of infusion of normal salt solution into the subcutaneous tissue is and has been for a decade or two a well established and valuable therapeutic measure, intravenous infusion has been rarely practiced since the date of the above fatal experiment. "If, however, one will read the more recent literature on the subject, he will be convinced that it is a *méasure* of the greatest value in saving life."

"Carefully conducted experiments on dogs by Bosc and Vedel show

that a solution of sodium chloride, between 0.5 per cent and 0.7 per cent, is to be preferred for intravenous infusion. A 0.7 per cent solution has more stimulating power than a 0.5 per cent, or a still weaker solution, and the beneficial effects which it produces are more lasting. It has also been demonstrated that calcium chloride and potassium chloride added to the normal salt solution will keep up the action of the heart longer than normal salt solution alone. Infusions of distilled water, strong salt solution, and milk have proved fatal in every case. Ordinary water may be used in case of necessity, but it should not be used in large quantities, or often."

The author's technique is admirably set forth as follows:

The solution used at the Massachusetts General Hospital is a modification of Ringer's solution: it is calcium chloride $1\frac{1}{2}$ grains, potassium chloride 1 grain, sodium chloride 90 grains, water 1 quart.

The technique of intravenous infusion is so simple that nobody need feel that it is necessary to have a surgeon at hand, or even another physician to assist, for it can be done very easily with the aid of one person. There are four points which should be noted when infusion is undertaken; these are:

- (1) Careful asepsis of arm, apparatus, and solution.
- (2) Care to get all the air out of the tube before introducing the canula.
- (3) Care to have the solution free from particles.
- (4) The use of a probe-pointed canula, and not a sharp-pointed needle.

With these points in view, there is comparatively little danger in the proceeding; in fact, there are in recent literature no reported cases of death caused by infusion, nor have we been able to learn of any ill effect in about seventy cases at the Massachusetts General Hospital. In experiments upon the lower animals unconsciousness is produced when the pressure of the solution is considerable, but consciousness returns as soon as the pressure is lowered.

The temperature of the solution, it is generally stated, should be 100° F.; but we should urge that it be considerably above this point, for the hotter the solution the greater its value as a stimulant. An initial temperature of 108° F. to 110° F. is well borne—the fluid is cooled from one to two degrees before reaching the circulation.

The amount of the solution to be injected at one time varies with the rapidity of the injection and with the quality and tension of the pulse. A thousand cubic centimetres, repeated when necessary, is generally much better than a larger amount given at one time.

The author reports in detail eight cases in which he practiced intravenous infusion. They were all surgical cases, *in extremis*, and had, in addition to the loss of blood, the very dubious qualification of shock

to contend with. Nevertheless, four of the eight were saved by the measure. With these facts in view, the author's conclusions seem well warranted. He says in his summary :

We have in this list eight cases, with four deaths and four recoveries. If out of eight desperate cases four can be saved, and if in about seventy cases there are no ill effects, what is there to prevent a more general use of infusion in severe cases of shock and hemorrhage? Wiggin reports a death, but in this case the patient had a weak heart, and three quarts of the solution were rapidly given. Undoubtedly one reason why this measure is not more frequently resorted to is the difficulty in always having the solution and apparatus ready. This, however, is not a valid excuse, for the canula is very small, and the salts can be carried in vials, in saturated solution, ready to use in a given quantity of warm water. The tubing and funnel can be found in almost any household.

KENTUCKY STATE SOCIETY.

Louisville has this year the honor of entertaining the State Society. That the compliment is appreciated is evidenced by the unusual interest shown by the local profession in backing the efforts of those able and untiring committeemen, Cecil, Vance, Cheatham, Frank, and Bullock, in their efforts to make the meeting memorable in the annals of Kentucky medicine.

The programme is well up in construction, though still open, and nothing will be left undone in the way of welcome and good cheer. The meeting will be held on May 17th, 18th, and 19th proximo.

Notes and Queries.

THE RELATIVE IMPORTANCE OF FLIES AND WATER SUPPLY IN SPREADING DISEASE.—At a meeting of the Sanitary Club of Buffalo on December 14th (N. Y. Med. News, December 31, 1898), M. A. Veeder, of Lyons, N. Y., read a paper on the relative importance of flies and water supply in spreading disease. From the protracted sanitary standpoint, he said, camp diseases can be divided into intestinal and malarial, the former including typhoid and yellow fever, dysentery, and cholera. In camps malaria is spread almost entirely by water, in intestinal diseases almost entirely by flies. The failure of measures directed to the water supply of the Cuban campaign, he ascribed to this fact. Even now typhoid is rife in Manila and Honolulu. In the recent campaign in Fashoda, although the climate was especially dry, and general conditions as to water supply favorable, typhoid was the greatest scourge of the army. An epidemic of dysentery was cited, taken in hand when forty cases had developed with ten deaths, the disease having spread from house to house by short leaps. After measures had been adopted to prevent access of flies, not a single new case developed. The progress of a camp disease by short leaps should suggest that it was borne by flies, while a general dissemination should call attention to the water supply. Flyborne epidemics also follow the direction of the wind; in large cities with general water supplies, free drainage, and absence of privy vaults, water is the great carrier of disease, whereas camps, like small villages, have most to fear from flies. For this reason typhoid is more or less prevalent at all seasons in the cities, usually only in the dry and sultry weather of early autumn in small villages. Veeder strongly condemns the practice of burying typhoid excrement, citing a series of little epidemics that could be traced to a nurse who had followed this method. After the nurse had herself succumbed to the disease, the epidemic ceased. Typhoid bacilli will penetrate to the surface of the soil if buried. Disinfection is necessary, and on account of its color, its permanence after evaporation and efficiency, copper sulphate is to be preferred. In camp on account of the practical impossibility of diagnosing incipient typhoid, all excreta should be disinfected. The coloration of the ground would show just how far the disinfection had been successful. Volatile disinfectants are not so serviceable as non-volatile. The United States Government plan of furnishing large, portable, water-tight tanks for use as sinks is good in theory, but scarcely practical. The Indians avoid sickness by frequently moving their camps. Burial of feces could be relied upon to afford protection against infection by flies for a few hours. Boiling would render water safe to drink, and, even

against malaria, this precaution would afford almost complete immunity, as the conveyance of this disease by mosquitos has been greatly exaggerated. Not only knowledge but discipline is necessary to protect the soldier, and sanitation under the guns of the enemy is a difficult matter.—*British Medical Journal*.

KENTUCKY STATE MEDICAL SOCIETY.—The Committee of Arrangements has sent out the following stirring appeal: The Kentucky State Medical Society will hold its next annual meeting at Louisville, Ky., May 17, 18, and 19, 1899. Liederkrantz Hall, corner Sixth and Walnut streets, has been secured for the sessions. This hall is centrally located, quiet and commodious, and admirably adapted for the meetings of the Society, with a separate hall conveniently situated for the display of exhibits.

It is the earnest desire of your Committee of Arrangements to make this meeting of the Society a notable success in every particular. To this end you are especially urged to attend. Come the first day and stay through the last, and bring your neighbor doctor with you. If you are not a Fellow of the Society, we will welcome you into the membership.

The programme is now being arranged; in order that the scientific part of this meeting may reach a success never before attained, it is hoped and expected that every one will take an active part in the proceedings. You are therefore urgently requested to send at once the title of your paper to Dr. Steele Bailey, Secretary, Stanford, Ky.

The Committee of Arrangements join with every friend and well-wisher of the Kentucky State Medical Society in hoping and endeavoring to make the approaching meeting the beginning of a new era in its existence.

We propose to leave nothing undone that will promote the success of this meeting, the welfare of the Society, or that will contribute to your pleasure and profit while with us.

Greatly reduced rates on all railroads will be secured.

JOHN G. CECIL, *Chairman*.

T. S. BULLOCK,

WM. CHEATHAM,

A. M. VANCE.

LOUIS FRANK.

"TYPHOID PLEURISY."—The *Semaine Medicale* of October 19th contains a valuable paper by M. Achard on this subject. Pleurisy occurring in typhoid fever may result from the action of the typhoid bacillus or from some other infection. Typhoid pleurisy may assume several forms—sero-fibrinous, hemorrhagic, or purulent. In some cases the pleurisy seems to have preceded the typhoid fever just as typhoid pneumonia may. The effusion may also show itself during the course of the disease. Thus a man, aged twenty-six years, with all the usual symptoms of typhoid fever, had dyspnea and dullness at the base of the left lung. Puncture showed the presence of fluid a little cloudy and containing red and white corpuscles.

On several occasions during a month serous fluid was obtained by puncture, which always contained the typhoid bacillus in pure culture. The signs disappeared, and he recovered. In another case, in a young woman, an empyema formed. At the end of the third week there was a friction sound at the left base; the temperature fell to normal and convalescence was apparently insured, but dullness was found at both bases, and pyrexia again appeared. An empyema formed on the left side. A liter of pus was evacuated, which contained the typhoid bacillus in pure culture. Resection of a rib and drainage were carried out and the patient recovered. Why does the typhoid bacillus produce pus in some cases and not in others? A categorical answer can not be given, but analogous cases can be cited. The swellings of osteo-myelitis are sometimes abortive and resolve without suppuration. The spleen is constantly the seat of bacillary foci in typhoid fever, but abscess results only exceptionally. In experimental inoculation of the typhoid bacillus, pus is sometimes produced, sometimes not. The same is true of the colon bacillus. Again, streptococci and staphylococci, microbes usually pyogenic, are sometimes present in non-suppurative lesions. Finally—a very complete analogy—the tubercle bacillus can induce fibrinous, serous, hemorrhagic, or purulent pleurisy. As to the treatment of typhoid empyema, M. Achard recommends postponing operation until the intestinal ulcers are healed and the patient has recovered strength. This course is possible, as typhoid empyema as a rule does not run a rapid course and has not a tendency to invade other parts or to give rise to general infection—septicemia, for example—as has empyema induced by streptococci.—*Lancet*.

METACRESOLANYTOL IN ERYSIPELAS.—Koelzen, of Loeffler's Institute (*Deut. med. Woch.*, October 27, 1898), relates an investigation into the use of this agent in the treatment of experimental erysipelas in animals and ordinary erysipelas in man. One of the objects of the investigation was to ascertain whether the bactericidal substances anytil and anytol can penetrate through the skin as well as ichthyol, from which they are derived. Metacresolanytol contains forty per cent metacresol and sixty per cent anytin. Erysipelas was produced in animals by the injection of the streptococcus or of the bacillus of mouse septicemia. Treatment was commenced as soon as a florid erysipelas developed in the ear. The author relates in detail several series of experiments, control experiments being also made. Painting the surface with the metacresolanytol was found more efficient than injecting it into the tissues round the erysipelatous patch. When the painting was carried out every two hours, the results were very satisfactory. Microscopical examination of the tissues in the cases treated by painting failed to discover the microbes which had originally set up the disease. The treatment was then applied to five cases of erysipelas in man. At first the patch was painted for twenty to thirty minutes, and then every two hours for ten, fifteen, or twenty minutes, according to the size of the

patch. The treatment was only continued for two or three days. If the erysipelas was very extensive, only the edges were painted. The solution used was a three per cent. Good results were noted in all the five cases, including a severe one. Details are appended of these cases. The author maintains that this method of treatment is well worthy of further trial.—*British Medical Journal*.

MARRIAGE AND HEART DISEASE.—Vinay (Lyon Medical, January 8, 1899) discusses at full, both socially and medically, the question, Should a girl of marriageable age subject to heart disease be allowed to marry? He agrees with Jaccoud, Huchard, and others that matrimony is not to be forbidden when the lesion is compensated and no complication has arisen. But the patient must be reminded that repeated pregnancies will influence the cardiac disease prejudicially. On the other hand, marriage must be forbidden if evident signs of insufficiency have been detected, such as pulmonary congestion, hemoptysis, and irregular pulse. Most serious, in this respect, is persistent albuminuria with hypertrophied heart, which is certain to involve grave trouble during pregnancy, and to compromise the child's life. Even when a patient is allowed to marry, she must be carefully watched when she becomes pregnant. During gestation some of the worst complications, due to thoracic and renal changes, are very apt to set in unless the patient modifies her habits and her diet. The physician should insist upon repose, milk diet, aperients, and free and frequent dry-cupping to the thorax. In this way the tendency of pregnancy to disturb the circulatory equilibrium is counteracted. The physician, directly pregnancy is confirmed, should look out for the first evidences of failure of compensation, such as dyspnea, palpitation, a tendency to bronchitis, and a pulse which, though it may be regular in rhythm and volume, is clearly too rapid. These are what Vinay terms gravidocardiac complications.—*Ibid.*

GASTROPTOSIS.—K. Thue (*Norsk Mag. f. Laegevidensk.*, December, 1898) has examined twenty-two cases of gastroptosis, and finds that the symptoms are, generally speaking, those of nervous dyspepsia. When one meets with the clinical picture of nervous dyspepsia complicated with obstruction, one should always examine into the position of the abdominal organs. Obstruction is an almost constant symptom of gastro-enteroptosis. In the diagnosis of gastroptosis the author has employed electric light, the stomach having been filled with from three quarters to one litre of water. In five of the male patients examined, including a boy of five years, there was a rachitically-deformed thorax. The female patients, who had also borne children, showed a degree of pendulous abdomen. In eleven cases there was in addition marked nephroptosis. The treatment consisted in the wearing of abdominal belts, the use of aperients, and careful dieting, and occasionally washing out of the stomach.—*Ibid.*

Special Notices.

CASE 1. M. S., fifty-two years of age, male, was some years afflicted with an obstinate form of erythema, probably of specific origin, which heretofore had resisted the usual constitutional and local treatments. The itching of the eruption was intolerable, the anemia very pronounced—the whole constitution run down. Six weeks medication with Iodia, supplemented by extract of malt and cod-liver oil, brought the case under control. I attribute the good effect of Iodia in this, as in other cases, not so much to its mineral ingredients (potass. iodide and ferri phosphate) as to their combination with the fresh principles of vegetable alteratives. I, for my part, believe that only the extracts of the green or fresh plants are reliable for therapeutic effects, the common fluid extracts of the dried plants having proven mostly inert in my hands.

CASE 2. R. W., aged thirty-eight; female; presented glandular enlargements complicated with functional disorders (dysmenorrhea). The persistent administration of Iodia brought marked improvement, and patient is on a fair way to recovery.

CASE 3. J. P., male, aged sixty; blood-poisoning with chemicals used for dyeing, manifesting itself in a rupia-like eruption and general malaise. Iodia promptly eliminated the morbid matter.

A. ZIEGLER, M. D.

Allegheny, Pa.

BETTER STILL.—The influenza has been quite prevalent in a number of cities during the past month. In Richmond there have been many cases, though no deaths distinctly attributed to it. It is affecting mostly those who have had the disease almost annually during the past few years. Although the attacks of this year are relatively mild, they are severe enough to keep business men away from their places of business. Phenacetin, or better still, antkamnia, with salol or quinia, and a little powdered digitalis added, has proved a satisfactory plan of treatment, presupposing, of course, that the bowels are kept open, the secretions of internal organs are attended to, and that the patient is kept in-doors, especially at night or in bad weather.—*The Virginia Medical Semi-Monthly*.

J. L. RIDLEY, M. D., Huntsville, Ala., says: I have used S. H. Kennedy's Extract of *Pinus Canadensis*, both white and dark. I can frequently cure gonorrhea without any other remedy. I use either as an injection, and prescribe the dark internally, where there is irritability about the mouth of the bladder. I have learned to regard it as a specific. In chronic cystitis I have derived great benefit from it, and in leucorrhea it relieves when many other remedies fail. It is a valuable remedy, and I have had marked success with it.

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THE AMERICAN PRACTITIONER AND NEWS.

"*NEC TENUI PENNÂ.*"

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE ALUMNI ADDRESS OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF LOUISVILLE—SESSION OF 1898-99.

BY T. B. GREENLEY, OF KENTUCKY (Class 1846).

Ladies and Gentlemen, and Members of the University, at the request of my old-time friend, Professor Bodine, your able and worthy Dean, I appear before you on the present interesting occasion to say a few words of encouragement to you as Alumni of my old Alma Mater, the Medical Department of the University of Louisville.

Being perhaps the oldest living alumnus of this renowned institution, you will perhaps bear with me if I should fail to meet your expectations in point of oratory or eloquence. Not possessing the powers, in these respects, of a Cicero or Demosthenes, I shall have to content myself, as a country doctor, to speak in the ordinary parlance of the day, if not in a humdrum way.

In the first place, I would like to express my thanks to your eminent Dean for the honor conferred on me by calling on me to address such a fine body of young doctors, who are just on the eve of entering one of the noblest professions extant, being second only to that of Theology, and, in fact, in some particulars equal to it; for in many instances we have to go among the poor and needy to heal them, as did our meek and lowly predecessor, the Saviour of mankind.

Every doctor should be proud of his profession and devoted to it, not only because it affords him a livelihood, but more particularly on account of the good he can render his fellow-man by the knowledge

he possesses in treating and curing, as well as preventing disease. He should be a philanthropist as well as a scientist.

Our profession for philanthropy and humanity stands, perhaps, at the head of all professions or associations of men. Medical men many times sacrifice their lives for the benefit of the sick. We do not flee when deadly epidemics make their appearance, but meet and combat them with all the means in our power, many times falling victims in efforts to relieve others. Of course this action requires heroic effort, but heroism, properly conducted, is one of our characteristics.

We are the only body of men who use means to diminish or curtail the source of our income by which we derive a livelihood. Our profession is doing this every day by endeavoring to prevent the occurrence of disease. This is done by quarantining, disinfectants, and general cleanliness.

We should feel proud of our characteristics in these particulars. To be sure our philanthropy and humane efforts tend to shorten our longevity, our lives on an average being four years shorter than that of any other calling or profession. This shortening of life is due to exposure to the influence of infectious and contagious diseases, and also to weather conditions. The consideration of all these drawbacks is calculated somewhat to chill our enthusiasm as professional men, but our will-power should be sufficient to enable us to pursue an even tenor of our way.

When we take hold of the plow let us not look back, but go forward undismayed.

When you settle in practice, look for a place where you think you can not only make a living, but where you think you will be satisfied to remain permanently. You may not jump right into a paying practice, but close attention to business, together with polite, gentlemanly deportment, will soon accomplish the desired result.

My advice to all young doctors, as well as others, is as soon as you are prosperously settled in practice, hunt up a good woman for a wife. This will give you not only a better standing in the community, but render you a happier man. It has always been my doctrine that every good man ought to have a good woman for a wife. He will find her a great helpmeet through this vale of tears.

If you should locate where there is competition, endeavor to keep on good terms with your confreres. Nothing seems to me so unpleasant as to see two or more doctors in a country town not on speaking terms,

and talking about each other behind their backs. This condition of things is not only unpleasant for the doctors, but more so for the community. In fact, it is sometimes quite a disadvantage to the people. If one doctor has a very sick patient, and consultation is needed, he is not sufficiently friendly with the other doctors to consult with them, and a doctor has to be called from a distance at a big expense to the sick.

It has been a common thing, if a young doctor settles down in a town or neighborhood where there is an old doctor, for the latter to pooh-pooh him out, saying he is an ignoramus and knows nothing about medicine, when probably he knows a great deal more than the old doctor.

I knew of a case of the kind, the old doctor telling the people that he had forgotten more than the young doctor knew. The young doctor on hearing of his talk, simply remarked that he thought the old doctor was correct when he said he had forgotten so much, as he did not seem to know much at present, and let it pass.

I can gladly say that I have assisted several young men into practice within the last score or so of years. I have always regarded it not only as an act of kindness and friendship, but really a matter of humanity and patriotism for the old doctor to assist the young physician in his practice. A matter of humanity in the point of view that we may teach him to treat his patients more successfully, and in a patriotic point of view that it will, in the course of nature, be but a short time before the young will have to take the place of the old.

A doctor should always be a gentleman, both in manner and dress. In speaking of dress I do not mean to say that he should imitate Beau Brummel or one of New York's 400, but his dress should be neat and cleanly, so that he will not attract attention either way.

In his manner he should always be pleasant and courteous. By observing characteristics of this kind, together with studious habits, business will finally come to him. "Success to him who patiently waits."

It is a good thing for a young doctor when he settles down to keep pretty closely at his office, surrounded by his books and medical journals when not attending his calls. He should not be a common hanger-on at the post-office, depot, or saloon. Habits of this kind would soon destroy confidence in his capacity for practice.

It is well for a physician to be a member of his State association, or at least his county society. This enables him to make acquaint-

ances of his medical confreres, which is an advantage, both in a social and professional point of view. The most eminent men in our profession are members of medical associations.

The doctor should also supply himself with medical journals, by which he is enabled to keep up with the advances of his profession. He should even familiarize himself with the history of medicine.

We have a great many characters in the history of ancient medicine as well as in modern which are greatly calculated to excite our interest. Although the earliest history we have any account of is somewhat mythical, yet it is interesting. If we go no farther back than the Greeks, and say nothing of the Egyptian, Indian, or Chinese doctors, we find medicine was practiced long before the Trojan War. Melampus, two hundred years before that time, was among the first in Greece, and was somewhat celebrated. He derived great notoriety by treating and curing the daughters of Prætus, King of Argos. Then came Æsculapius, who was the most celebrated disciple of Chiron the Hermit; was the most eminent in a medical point of view; in fact, was denominated the god of medicine. He had two sons, both physicians as well as soldiers. He also had two daughters, Hygeia and Panacea—the first expressing health and the other a remedy for all diseases. The latter name will remind you of some of the patent medicines of our day.

We might omit the names of many more of the ancient great Grecians and come down to the real father of medicine, Hippocrates, who was born four hundred and sixty years before Christ. He was the author of a great many books pertaining to his profession, and we moderns are somewhat astonished at the great knowledge he possessed respecting medicine. Besides this great man there were others of eminence, who were either contemporary with him or his early successors. He had two sons and a son-in-law who were physicians. Then came Diocles and Praxagoras, the last of Asclepiadæ.

We might also name Plato and Aristotle, philosophers as well as medical men. They exerted great influence over the minds of the people. Aristotle left several works on medicine, exhibiting great genius for the time in which he lived. We might now step down to the time of Galen, A. D. 200, when we find several sects in medicine, as we have to-day, to wit, dogmatism, empiricism, methodism, and eclecticism. Time will not permit me to define these different terms, but they convey pretty clearly their true meaning. Galen endeavored to modify the character of these different sects, and, although quite

egotistical, exerted a great influence over the medical mind long after his death.

From the time of the destruction of the Library at Alexander, A. D. 640, by the Arabs, medicine was on the wane till about the close of the "Dark Ages." Charlatans and fakirs held sway for centuries. The revival of true medicine began in the fourteenth and fifteenth centuries, soon after the discovery of printing, when many universities were established in different cities of Europe. Many lights in medicine now began to manifest themselves. We will only cite the names of a few of the prominent men: Girard of Cremona, William of Salicet, Arnold De Villeneuve; Lefranc was from Milan, and was a surgeon. John Petard was surgeon to Philip Le Bel, of France. Guy de Chantiac was the most famous of the surgeons during the Arabic period. The first great physician of England was Linacre, of Canterbury. He was physician to Henry the VIII and Queen Mary. We might also name Ambrose Pare and Guilleman. The latter was the first to advise the termination of labor in case of hemorrhage or convulsions.

Harvey in the sixteenth century discovered the circulation of the blood, and Kepler announced that the crystalline lens was not the seat of vision, but merely refracted the rays of light, and that the image of objects is painted on the retina.

Great men in different parts of Europe now appeared so rapidly that time will not permit to further name them. We might, however, allude to Sydenham and the Hunters, of England.

Medicine and surgery have made such rapid strides within the last few decades, it keeps one busy to keep pace with them. Hygiene has also made rapid advances, which, together with the improvements in treating diseases, have lengthened the average longevity of man nearly one hundred per cent within the present century.

Besides the possession of general knowledge, the doctor should be an observer of the Code of Ethics by which the profession claim to be governed. He should look down upon all fakirs and quacks in medicine, and treat them with disdain. In a word, he should eschew commercialism and active politics, and be strictly an honest, upright man. Pay no attention to quack advertisements illuminated with portraits of patients cured, with their certificates in praise of the remedy.

In order to attract the attention of the credulous you see in almost every paper you pick up pictures of beauty and health, cured by some

compound or nerve medicine after all the doctors had failed to do any good. These displays are intended to act on the imaginations of the well, inducing them to try some of the remedies by which they may be beautified or improved in appearance. Then, perhaps, in the same paper you will see long articles headed by pictures of skeletons, serpents, *id genus omne*, which are intended to alarm the people so as to induce them to think it necessary to take some of the medicine to prevent some great calamity happening. Now and then we even see some remedy offered for well people to take to keep them from getting sick. All such stuff you are to ignore and treat with contempt. The noted Rev. Mr. Moody has a maxim that will serve to show why it is that the pernicious advertising of quackery thrives so well in so-called religious journals, namely: that "sick sheep will heed the call of anybody."

The doctor should be an even-tempered man, ignoring and allowing to pass unnoticed any gossip talk he may hear that has been said about him. In a word, we should learn to govern ourselves, both mentally and physically. Especially, don't allow yourselves to worry, but, as we before remarked, cultivate an even-tempered disposition. Be rather an optimist than a pessimist.

"Don't worry your souls with troubles,
And fret and fume all the day,
But grasp them, and like air-bubbles
They vanish in mist away.

"Don't burden your hearts with sorrow,
And see but the darkness ahead,
But hope for a brighter to-morrow,
When the yesterdays all are dead."

And now, gentlemen of the Alumni of the Class of 1898-99, what shall I say to you in closing? You need not be afraid of living to be old, as I can assure you that if we live an upright life, and do our duty as professional men in the various lines devolving upon us, we will be as happy and enjoy life in old age as well as we do in our younger days. If we allow ourselves to be guided by our ego, or that second self, the still, small voice called conscience, we need fear no evil. Then, when we come to be old and take a retrospective view of our past lives, and that still, small voice, conscience, says all's well, we should not fear death, but be proud of our longevity. As an illustration of these views we have a noble example in our illustrious confrere, the late Dr. Holmes. At his eighty-fourth birthday celebration he was congratulated on his young appearance, when he remarked that he had rather be a young old man than an old young man.

Your humble speaker is past the octogenarian mark, and is now heading for the century mark, and would remark, *en passant*, that he hopes when you arrive at his age you may feel as well and as happy as he does.

If I have not, in my remarks, met your expectations in ability of expression, or interest in matter, I hope you will attribute the defects to the head and not the heart.

I only have to say that I love my profession, my old *Alma Mater*, and my old faculty of the forties. They were a great and good body of men.

I never feel so happy as I do when among my fellow-doctors; and here is to you—with the hope that you may all be able to climb high up the ladder of fame.

OREL, KY.

THE CLASS VALEDICTORY OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF LOUISVILLE—SESSION OF 1898-99.

BY J. N. SEBASTIAN, M. D.

A little more than two thousand years ago, in the Temples of Æsculapius, was planted the germ of scientific medicine. From a minute protoplasmic mass of knowledge, possessing neither form nor consistency, it has evolved into a science which is as far-reaching as the human mind and as deep as the mysteries of nature.

Slowly she has risen from the mists of ignorance and superstition, harnessing into her service one by one the forces of nature. Degree by degree she has advanced, stratum upon stratum has been added, until to-day medicine stands broadest, deepest, and noblest of all the learned professions.

The introduction into medicine of such instruments of precision as the microscope, the stethoscope, the laryngoscope, the sphygmograph, and the clinical thermometer was a herald of the coming day. Virchow with his microscope opened up a new pathology; Pasteur, by his accurate experimental work, laid the foundation upon which modern surgery and medicine rest; Lord Lister, by his keen surgical insight, grasped the relation of the microbe to disease and established the practice of asepsis. But these are not the only builders of this learned profession. Thousands upon thousands of as bright minds, as

dauntless and untiring in perseverance, have worshiped at the same shrine, have gloried in the same homage, and have spent their lives and fortunes in placing medicine upon the firm foundation upon which it now stands.

It would require a wider knowledge of facts, a broader view of the humanities than I possess, and an extended and varied experience to follow the evolution of so learned a science as medicine. But there is a feature to this profession which may be observed and understood by us all. The rich and the poor, the low and the high, the learned and the unlearned appreciate alike its value. It is this feature of philanthropy which ennobles the profession, and it is this which elevates the true doctor above the cold, passive votary of science and makes him in truth the highest minister of the benevolence and goodness of God. This is the unwritten department of medicine, existing not more in the character of the office than in the heart of the doctor.

By none should the beneficence of this office be appreciated more highly than by the lowly and the poor. In the extremity of sickness and distress the poor man asks the doctor for the gift of his services. Without hope of remuneration or reward, for the sake of suffering humanity, for the sake of duty and the honor of his profession, he goes forth, in rain or in snow, to perform his acts of charity and kindness.

Not only in the private walks of life may be cited the good derived from this profession, but the doctor is as well, in the highest degree, a national benefactor. In our armies and navies his services are indispensable. He figures as conspicuously on the field of battle as do the leaders of the fray, and though he is not so apt to win glory and honor, he is in truth the hero in the strife.

The ideal doctor is a man of strong character, not only learned in his profession but permeated with that tact which is only the offspring of a generous and a sympathizing nature. In the practice of his profession he does not seek for glory or for fame, but his goal may be found in the highest interests of a broad and a generous humanity. At his best he is but the humble agent of a great and noble science—a science that has labored unceasingly from the time of Hippocrates, not to increase the power of despots or to add to the magnificence of courts, but to extend human happiness, to prolong human life, to extinguish human pain. She points not to pyramids built through weary centuries, but to the living, never-dying fruits of her efforts.

She has, by her anesthetics, enabled the sufferer to grow hushed and unconscious while the operator's knife cuts a fragment from the nervous circle of the unquivering eye; she has lengthened life; she has minimized danger; she has trampled on disease. These are the temples in which he worships, this is the shrine at which he bows down.

Fellow-classmates, we are to-day enrolled as Doctors of Medicine. It remains with us alone whether we be workers or drones in the profession; benefactors of our kind or parasites on the body politic. Not all can become a Pasteur or a Koch, but each of us can fill with honor the little niche which God in His infinite wisdom has destined for us. On us will fall the mantle of our renowned predecessors, and now is the time to answer the question, What shall we do with it? Shall we use it for the attainment of wealth and of fame, or shall we smite with it the bustling phalanx of suffering and disease? Our answers will be formed by the innate man with which nature has endowed us.

And now, gentlemen of the faculty, it devolves upon me, in behalf of the Class of '99, to bid you farewell. For three long years we have labored in the halls of the old University, and as in all things else, our experiences have been freely sprinkled with pleasure and with pain. The kindly interest you have shown in our welfare we appreciate; your ability to instill into the mind the principles of our profession we revere, but the examples set before us by each and every member of the faculty we will ever keep with us in after-life, to emulate and to spur us on to nobler deeds and higher attainments.

Gentlemen of the graduating class, this is the Commencement day of our professional careers, and no better foundation could be had to begin on than those resistless moral forces, God's laws, and by them, and not by our intellectual powers, we may expect to be carried forward over prostrate opposition to enduring triumph.

Let us labor, then, not for the fitful plaudits of a flattering public, but for the highest good of a broad and a generous humanity. Let us do our duty, acquit ourselves like men, and so conduct ourselves in our private lives and in our profession that when the last summons comes, we may approach the grave "like one who wraps the drapery of his couch about him and lies down to pleasant dreams."

BOONEVILLE, KY.

"WHERE ARE WE AT?"***A Discussion of the Commission Evil.****BY AP MORGAN VANCE, M. D.**

In the last several months there has been much discussion *pro* and *con* of the Commission Evil, that is, the mutual arrangement between the general practitioner and the specialist for a division of fees accruing from work which has been referred from one to the other. It would seem that this discussion followed an article in the Colorado Medical Journal last July by Doctor Melville Black, a specialist of Denver, Col., who advocated, under certain conditions, the payment by the specialist to the practitioner a portion of the fees obtained by him from patients referred.

Feeling that this Society is representative and should not be behind-hand in any thing pertaining to our work, I thought it fit to bring this matter up for discussion to-night. If any of us are guilty of these practices, the free discussion of same may do us good in causing us to see the error of our ways; if we are innocent, the result of the discussion may do good to others.

I will quote Doctor Black's paper in full and give some of the ideas of other men from different sections on the subject, with some comments of my own as we progress. Doctor Black's paper is as follows:

SHOULD THE GENERAL PRACTITIONER RECEIVE A FEE FOR REFERRING CASES TO THE SPECIALIST?

It may seem to a certain few that such a subject should be left out of print. I do not consider it a delicate question, nor one that is best discussed *sub rosa*. I believe that in a certain number of cases the physician should receive a fee for referring cases to the specialist.

The general practitioner is called upon to render every kind of medical and surgical service. If he sees fit to send certain cases to a specialist, he displays a magnanimity unparalleled in other fields of labor. We will admit that in many instances his training and equipment are inadequate in some of the departments now presided over by specialists. The advancement of medicine and surgery has made it difficult for any one man to keep abreast of the entire field. He frequently recognizes that his knowledge in some one department is deficient. He is honest and tells the patient so. The patient is sent to a specialist. There are many instances where the practitioner has found it advisable to administer to his patient for several

* Read before the Louisville Medico-Chirurgical Society, March 10, 1899. For discussion see page 265

days before it is possible to refer him to a specialist. Again, in his anxiety for the welfare of his patient he may make several visits in the endeavor to cause the latter to consult the specialist, or may lose valuable time in going with him to the specialist. In any event he expends a certain amount of his time for which the patient will not compensate him. The patient and his family have long looked upon him as their friend and medical adviser. They never think of paying him for aught except actual professional services. They would not consider such services professional, and he would gain their displeasure if he were to present his bill for the same. In case he has treated the patient for a few days he would better erase any and all such charges for professional services from his books, because the patient considers that he has received no benefit from this treatment; that his physician did not understand his case or he would not have sent him to some one else. Therefore if this bill is presented no attention is paid to it, and if payment is pressed, the next time a physician is needed some one else is called in. Now, who is to compensate this physician? There is but one answer—the specialist. If the specialist does not pay him for the time he has expended, no one else does. The specialist can easily learn from the patient the extent of the services rendered by his physician. The latter should then be compensated accordingly.

There are many times when the family physician is asked to recommend a specialist. He is not called upon for services, nor does he find it necessary to see that the patient goes where directed. He is not inconvenienced nor does he spend any of his time upon the case. Here it is not incumbent upon the specialist to pay the practitioner for his kindness.

Many an obscure practitioner gains standing and even prominence through the specialist. Specialists to whom he refers cases make it a point to speak well of him whenever the opportunity is afforded. This is the only honorable way in which the specialist can return many favors and acts of kindness shown him by the general practitioner.

We all make mistakes, even the general practitioner. What he has done for a given case may not meet with our approval. A hasty word or a sign of disapproval may ruin the reputation of this physician in the eyes of the patient. Hence many cases are not referred because of some such former experience. Again, the time expended on a case has been considerable, to say nothing of the mental worry. To refer the case may mean that all this goes for nothing. The man to whom the case is referred forgets to even say thanks. A few such experiences tend to sour the general practitioner against specialists in general.

The object of this paper is to draw a closer bond of union between the general practitioner and the specialist; to call the attention of the specialist to his duty whenever it is plain.

I do not recommend that physicians be paid a stipulated percentage of all fees received from cases referred by them. I should consider this a great wrong. What I do advocate is that when a physician has expended

time and energy in getting a patient to come to us, or has prescribed for the patient without compensation, it should be our duty to pay the physician a reasonable fee.

MELVILLE BLACK, M. D.

I have studied this paper very carefully. I agree with the author that this matter should be openly discussed, but can not agree with him in his conclusions. I think he is honest in the matter and believes he is right, but he is all wrong. If he will simply apply the Golden Rule to the case, it is settled at once. Let Doctor Black put himself in the patient's place and I am sure his conclusion will be different. Why the specialist is called upon to convert himself into a combined detective and collecting agency for the benefit of the practitioner who has had the patient first, and knows exactly how much service he has rendered, and is backed by the legal and moral right to collect for himself, I am unable to see. Any considerations of policy about doing this is a matter to be decided for himself. I think the doctor is simply "whipping the devil around the stump" in the special proposition he makes. I take it this is also the idea of Doctor Charles Lyman Greene, of St. Paul, Minn., expressed in a letter to the editor of the New York Medical Journal, under date of October 16, 1898:

FEES FOR REFERRING PATIENTS TO CONSULTANTS.

150 LOWRY ARCADE, ST. PAUL, MINN., October 16, 1898.

To the Editor of the New York Medical Journal:

SIR: In your issue for October 8th you referred editorially to a paper written by a Western man, who advocates the payment by the consultant of a commission to the general practitioner for referred cases. Such a proposition would not ordinarily be deemed worthy of notice, and I am very glad to see that it has in no respect received your editorial approval, though I am somewhat disappointed that it did not meet with the rebuke it so richly deserves. It has been whispered about for some time that certain men were accustomed to bid in this way for practice, but few of us have imagined that any man would be bold enough to openly advocate the introduction of such a shameful commercial method into a profession whose very foundation is the trust and confidence of its patrons.

If this writer's ideas were to be adopted, we should behold the edifying spectacle of a thoroughly degraded profession bidding, the one against the other, for reference of cases. The most unscrupulous man with the longest purse would, presumably, command the largest practice. With the advent of any such system the dignity of the profession of medicine would be forever lost. At present the patient assumes that when his family physician refers him to a specialist he, the family physician, is acting solely for the

best good of his patient, and that the man to whom he is referred is selected because he is, in the opinion of the physician, the one best qualified to advise or treat him. This is recognized and appreciated by the patient as an unselfish act, and it is one of the many which serve to bind him closely to his medical adviser. Supposing that a patient knew that his reference was made in return for a substantial fee, can it be assumed for a moment that his regard for his physician would remain the same? Most certainly not, for it is evident that he would have no confidence in the specialist who purchased him, and he would have lost all regard for his family physician who sold him.

The only way in which this delectable arrangement can be carried on is in the sneaking, underhanded way which characterizes it at present; for, in spite of the many evidences of commercialism creeping out from time to time, in spite of the shameful spectacle furnished by one of the leading members of the profession in Germany, who now seeks to fatten upon the proceeds of a patent upon other men's ideas, in spite of the fact that commercialism of the rankest quality pervades our national association, nevertheless the great body of the profession of this country will cling to the old ideals, and its best men will continue to do practice based upon merit and not upon purchase or advertising.

Behrings may grow rich upon the unclean proceeds of patent rights, but Tyndalls, Faradays, Pasteurs, Listers, and Simses will always predominate, and their spirit of noble and unselfish generosity will pervade the work of our profession. In short, the great body of the medical profession to-day is clean, and so it desires to remain.

CHARLES LYMAN GREENE, M. D.

The editorial referred to by Doctor Greene, in part, is as follows. After mentioning the main points in Doctor Black's paper, Doctor Foster says:

We fear it can not be denied that the picture of unrequited and unappreciated services drawn by the writer is one that has its original in the experience of many a struggling and thoroughly deserving physician, but we question if the remedy proposed is just or would prove satisfactory to anybody concerned, except perhaps the untutored patient. The general practitioner's selection of the specialist does, of course, work to the latter's benefit, but, if it is made conscientiously, it is not governed in any degree by a desire to do the specialist a good turn; it is made solely in the interest of the patient, and nobody else should be expected to pay for the attendance that led up to it. While this is the case, however, the specialist certainly has a duty to perform, provided the man first consulted has so managed matters as to enable him to perform it. As things go, there is too much turning of patients over to specialists. If the case admits of doubt at the outset as to whether or not a specialist's services are required,

a consultation may be asked for, and in the course of the visit the specialist, except perhaps in rare instances calling for continued manipulative treatment, should give the patient to understand that he will not take exclusive charge of the case, but will meet the family physician in consultation as often as may be necessary. There is no good reason why the great majority of cases should not be as efficiently managed, so far as the routine treatment is concerned, by the general practitioner as by the specialist, and the latter should forego taking them away from a competent colleague simply because they come under one or another of the headings in the literature of his specialty.

The second condition pictured by Dr. Black is that in which the patient consults his physician, not with the view of getting his advice concerning his ailment, but simply and avowedly to avail himself of the physician's knowledge of specialists. When that is the state of things, Dr. Black thinks, the specialist is under no obligation to pay the practitioner. The selection of a specialist is, however, in itself a valuable service to the patient, and under certain circumstances, we think, it ought not to be rendered without recompense.

I do not know how it is in Doctor Foster's section, but with us it is certainly the privilege and practice of the physician to decide in what way he will receive the aid of the specialist; that is, by turning the patient over to him entirely, or admitting him as a consultant only. The latter method, in my experience, is the more common, working often to the consultant's disadvantage, as he is usually held responsible for the outcome of the case.

I will quote next some letters of Doctors Black and Greene, which further elucidate the subject:

150 LOWRY ARCADE, ST. PAUL, MINN., November 9, 1898.

To the Editor of the New York Medical Journal:

SIR: Since writing the letter published in your issue for October 29th I have received a letter from Dr. Melville Black, of Denver, Colorado, inclosing a reprint of the original paper which formed the basis of the editorial contained in your issue of October 8th. Dr. Black expressly disclaims any intention of advocating the payment of fees for reference of cases, save in exceptional instances where a certain amount of service has been rendered by the general practitioner prior to the reference of the case, it being assumed, quite wrongly, I think, that otherwise the family physician would not be able to collect the fee for his services.

In justice to Dr. Black, I would ask you to publish my reply to him under date of November 7th. I am glad to learn that the doctor's position is very nearly in line with the general sentiment of the profession, but I am very glad indeed that my original letter was written, because I have

since learned that this payment and collection of commissions is far more general than I had formerly believed. It is not carried on openly, but wholly in a subterranean way. It seems to depend upon the curious belief that the physician has a property interest in any patient who comes to his office for advice. I sincerely hope that the New York Medical Journal will use its great influence to wipe out this stain upon our profession. Now that the matter has been brought to light and is in danger of being brought to the attention of the laity, there can be little question as to its ultimate fate.

CHARLES LYMAN GREENE, M. D.

[DR. BLACK TO DR. GREENE.]

Dr. Charles Lyman Greene, St. Paul, Minnesota:

DEAR DOCTOR: Please find inclosed a reprint of the article you so kindly criticised in a recent number of the New York Medical Journal. I feel sure that you have not read the article, or your remarks would not be so unjust. You have evidently based your letter upon the editorial in the Journal of a few weeks ago. I am inclined to think that if you will read that editorial again, and more carefully, you will find that it did not altogether disapprove of my position. I fully agree with you in all your letter contains relative to paying physicians commissions for referring cases. It was my intention to make such distinctions as individual cases warranted. I believe that I made that point plain in my paper. This paper was copied almost entirely in the Medical Record, with a very favorable editorial comment. I am sorry you did not see that editorial, as it would have given you a better idea of my position. I trust you may see that you have been somewhat hasty in your comment, and that you will take appropriate steps accordingly.

Very sincerely yours,

MELVILLE BLACK, M. D.

[DR. GREENE TO DR. BLACK.]

Dr. Melville Black, Denver, Colorado:

DEAR DOCTOR: I beg to acknowledge, with thanks, receipt of your reprint, and hasten to acquit you of the major portion of my original charge.

I feel very strongly, however, that your position is unsound, and that its adoption even along the lines indicated would serve to open the way to a very dangerous form of professional competition.

The doctor should certainly be paid for all material services rendered his patients, and I am very sure that he can and generally does collect from them for any service of the sort mentioned by you.

If he does not, I hardly see how he can expect any one else to make his loss good. Certainly the man receiving the case can not safely do so, for the practice of medicine must, like Cæsar's wife, be above suspicion.

I think the matter will be very thoroughly ventilated in the near future, for I have learned, much to my astonishment, that the actual buying and selling of cases has already come to be far from uncommon, even in high places.

It gives me great pleasure to learn that our views are in accord upon the major proposition at least, and I trust you will see the danger and impropriety of any action which might in the smallest degree infringe that rule of conduct which should govern the consultant in his relations with the general practitioner or his fellow specialists. Yours very truly,

CHARLES LYMAN GREENE, M. D.

Doctor Robert T. Morris is next heard from, writing the following letters to the editor of the *Journal of the American Medical Association*, excited by an editorial in that journal, which I will also read:

THE COMMISSION EVIL.

To the Editor :

NEW YORK November 14, 1898.

In the *Journal* of November 13, 1898, I find an editorial under the caption of "The Commission Evil" which reads almost like a slander upon the profession, and which leads me to ask if the editor actually has knowledge of specific instances in which a commission or rebate has been paid by the general practitioner to the specialist?

My own work is almost wholly with physicians, and among the hundreds with whom I come in contact not one has ever intimated that he would like to have a commission or rebate. Sometimes when I have done work for a poor patient whose friends have collected a small fee for me and none at all for the family physician, who has much work to do for the patient, I have insisted that the physician should take a part of the fee, and even in such cases have usually found him unwilling to take any part thereof. Possibly the report that specialists claim commissions has come from some one who feared that he was not getting his share of work because he did not give commissions, but the acquaintances of such a man could probably inform him of the real reason why he had failed to engage the confidence of physicians. Not long ago a truss-maker offered a ten-per-cent commission on all cases referred to him, and all my cases for trusses have since then been directed to go elsewhere. Every responsible physician knows how patients trust him, and he selects with great care the specialist who is to do work for any of his clientele. He must be instinctively repelled by the idea of receiving a commission for doing the right thing by a patient who has put confidence in him.

Physicians in my circle of acquaintance present two well-marked attitudes. In one class the physician persuades me to do work for small fees, hoping thereby to gain personal prestige with the patient. In the other class the physician says, "I want to be fair to you and to my patient. My patient can not pay you \$5,000 for his operation without depriving himself

a good deal, but he can pay you \$2,500. A third class in which the physician asks for or would accept a commission is not met with in my practice at all, and I believe that my practice is representative, and that other surgeons who are held to be responsible men will give precisely the same testimony.

ROBERT T. MORRIS, M. D.

To the Editor :

NEW YORK CITY, December 19, 1898.

In response to my request for specific information about instances in which the specialist has paid commission to the general practitioner for referred cases, I have received several communications which indicate that the practice is not uncommon in a section of our country which is renowned for its "hustling" spirit. Personal inquiry among representative members of the profession in New York convinces me that my first impression was right, and that a division of the fee is never likely to become a practice here, excepting in instances where the patient agrees to pay a definite sum for the entire management of the case. This is rare, and would be an openly conducted transaction. I am in a position to see two sides of the matter. I have dropped from my practice every thing excepting operative surgery, but during the year a good many other sorts of cases come in, which are referred to men who I believe are best authority. If any one of these men had been in the habit of offering a commission it certainly would have come to my knowledge, and further, he certainly would never have another one of my cases. On the other hand, I am constantly in contact with physicians who bring cases from all over the country, and not one of them has ever suggested that he would like a commission. As some of these physicians have come from the commission-infected area, they must have lost the symptoms on arrival in our atmosphere.

Payment of commissions would undermine the very pillars and foundation of responsible medical service, and would instantly bring us down into competition with charlatans. It is apparently a fact, however, that the commission evil has gained a foothold in a small part of the country, and perhaps very good land has been invaded by the Russian thistle. In order to keep reputable specialists who are subjected to the unfortunate influence of the commission evil, I propose that at the next meeting of the American Medical Association a resolution be adopted to the effect that any practitioner of medicine who gives or receives a commission for cases referred to or by him, shall be expelled from membership in the Association. I also propose that specially printed, conspicuous cards bearing a copy of this resolution be given to the secretary of the Association for distribution to applicants. Any one who needs to protect himself can display the card in a manner suitable to an occasion.

ROBERT T. MORRIS, M. D.

THE COMMISSION EVIL.

An evil has lately sprung up which is not specially creditable to those concerned; this is the practice of paying commissions or rebates by specialists to persons bringing them cases. A few years since the medical

world was set sneering by the well-authenticated report that in a certain city the physicians sent out drummers to board incoming trains and by skillful touting to secure business for their respective employers. Fabulous tales were told of the wealth piled up in this way, and when the light was turned on this practice, the legislature enacted a law that all persons engaged in this business should wear a badge. This put an end to this scandal. There is little difference between these now obsolete methods and those now practiced in many of our Northern cities, only that professional men are employed as drummers and the slice of the fee is larger.

Another variety of this commercialism has reached the hitherto honest practitioner in the country. The plan is this: Dr. A. brings a patient to Specialist B. or General Surgeon C. A. says, "here is a man abundantly able to pay a good fee; charge him liberally, but I want one third or one half." Should the specialist or the general surgeon refuse to accede to this proposition, the patient is taken elsewhere to some less scrupulous brother.

The wrong is to the unsuspecting victim; he trusts his family physician to send him to the specialist of his selection to be sure, but he has a moral right to expect that selection to be made on honest judgment and not with regard to the division of a great fee. Nor is this practice fair to the specialist and surgeon, for they get the credit of charging an exorbitant fee, only a part of which they actually receive.

No. Let each practitioner have his regular and proper fee, and if any division must be made, let the patient know exactly whom he is paying.

My friend, Doctor Morris, is inclined to "put it on" the West, but I think as he investigates further he will find that we are all in the same boat, and this evil will be found to exist everywhere in one form or another.

On the following date we hear again from Doctor Greene in a letter to the editor of the Association Journal in answer to Doctor Morris' inquiries:

To the Editor:

ST. PAUL, MINN., November 28, 1898.

In your issue dated November 26th, Dr. Robert T. Morris writes to inquire whether your editorial condemning the purchase and sale of cases is founded upon a knowledge of specific instances of this sort.

I can not answer for the Journal, but can assure Dr. Morris that I know of at least a half-dozen surgeons and physicians of excellent standing in the profession who in a subterranean way carry on this traffic.

As an internalist I can not say that I have ever felt such competition, nor indeed do I know of any strictly medical man who pays commissions, but I have personal knowledge of a score of surgical cases in which fees have been paid or demanded.

It has given me great pleasure to know that my protest against this indefensible practice, contained in a letter to the New York Medical Journal of October 29th, has resulted in bringing this matter into a prominence which must end in its complete annihilation.

Yours very truly,

CHAS. LYMAN GREENE, M. D.

Minnesota is again in evidence in two other letters to the same journal, which I think to the point:

To the Editor :

MINNEAPOLIS, MINN., November 30, 1898.

The editorial in the Journal of November 12th, on the "Commission Evil," sounds very much as though the writer had stumbled upon the unpleasant fact that some of his friends were engaged in the disreputable practice mentioned. The protest seems a very mild one if the evil is as widespread as the writer claims. Dr. Morris' communication in the last issue (*vide* Journal, p. 1314) affords the pleasant assurance that specialists in the East are still in sight, at least, of the ancient traditions. Unfortunately some of our western towns have become so infected with this evil that no honest, self-respecting specialist would dare make the effort to establish himself if he knew the facts. For the past few years, in this city, a patient with an eye bandaged could not walk our down-town streets without being approached by runners with the offer to take him to a better surgeon than the one he was employing. I do not know how many general practitioners are willing to accept bribes, but the fact that advertising quacks find it profitable to send circulars to the profession, offering commissions on all business sent to their surgical, lying-in, and other hospitals, is very suggestive, and the fact that men known to be guilty of employing runners are gilt-edged candidates for any position in the gift of their professional brethren does not indicate such a puritanic state of mind on the part of the latter as would blind them to the glitter of a dishonest dollar. The specialist who fees the runner or the family physician; the insurance examiner who divides his fee with the agent; the surgeon who operates cases for the advertising quacks; as well as the dishonest family physician who betrays his trust, are the parasites of our profession. I congratulate Dr. Morris on living in a community where such men are not the *leaders* of the profession.

EDWARD J. BROWN, M. D.

WHITHER ARE WE TENDING?

To the Editor :

OWATONNA, MINN., Dec. 13, 1898.

Apropos of the commission evil, which is being discussed in the Journal, I can not resist the inclination to say a few words upon this and other evils that pervade the profession.

Undoubtedly there is not a State in the Union that is not infected with the commission evil to a greater or less extent. It may be accounted for

in various ways, the principal of which is the overcrowding of the profession everywhere and the consequent scramble for business by many of its members.

Probably there are always men in every profession who will stoop to such practices for money, but this is peculiarly true of the medical fraternity. Nor is this the limit to the sacrifice of honor and dignity which the profession is daily making. We have men in the profession who personally go on the street and solicit business. Only a short time ago I saw the wife of a reputable (supposed) physician collar a boy with a dirty rag on his throat and steer him to her husband's office. When that same woman hears of a woman who is pregnant she coaches her and uses her utmost endeavors to inveigle her to employ her husband. This same man advertises his confinement cases in the secular press after they have occurred.

Physicians even prostitute the church for the furtherance of their interests. Not long ago two ladies joined a certain church. At the instance of a physician who was a member of that church, the pastor called upon these ladies within a week after their reception into the church and requested them to employ the above-mentioned physician, though they assured the pastor that they were well satisfied with their present medical attendant, who had borne that relation to them for the last twenty-five years.

Neither are the features thus far enumerated the only evils that have taken possession of the profession. How often do we commence the perusal of an article in some reputable medical journal by a physician who has a high standing in the profession, only to find that the said article, instead of being devoted to the advancement of medical science, is written to extol the virtues of some proprietary article, or in the interests of some manufacturing firm. It is needless to mention the fee that he gets for this article or the elasticity of his conscience, though the act does detract from the standing of the entire profession. Nor is the medical press immune to this disease. As every intelligent physician is supposed to read, it is entirely unnecessary to mention the different ways in which it is perverted.

These lines are not written in a spirit of querulousness, but every physician engaged in active practice knows that they are facts that can not be gainsaid. Admitting this to be true, the caption at the head of this article naturally presents itself. If this disease which infects the profession is not already malignant, it will soon become so—provided it continues. Is there a remedy? Would it not be of profit to the American Medical Association at its next session to direct a little of the force it expends upon scientific papers in the direction of the correction of these evils?

THEO. L. HATCH, M. D.

An editorial in the New York Medical Record for September 3, 1898, called forth by Doctor Black's paper, says in part:

Dr. Black aptly says that many an obscure practitioner gains standing and even prominence through the specialist. Specialists to whom he refers cases make it a point to speak well of him whenever the opportunity is afforded. This is the only honorable way in which the specialist can return many favors and acts of kindness shown him by the general practitioner. On the other hand, many a specialist can either damn a practitioner with faint praise, or by some remark or even by some mannerism convey to the patient the fact that his treatment previously received at the hands of the practitioner has been far from right. That this is often done, no one who has had much experience with specialists will doubt. The trouble arises from the fact that the two medical men can not always look at a given case from a common point of view. Here lies one evident danger of specialism—that of seeing a case only from the individual standpoint. "The specialist," says Dr. Holmes, "has only one fang with which to seize and hold his prey, but that is a sharp and cruel canine."

A practical difficulty in the arrangement of the scheme proposed is to find a basis on which an equitable settlement could be made. Dr. Black does not recommend that physicians should be paid a stipulated percentage of all fees received from cases referred by them. Such an arrangement might lead to greater evils than those it aims to avoid.

In our view, much of the difficulty existing between the different classes of the profession at the present time is due to the fact that every man who reads the papers thinks that he knows at least half as much as the doctors. Between the various domestic remedies mentioned on the "only woman's page" of modern journalism, the semi-medical lectures delivered in so many places, etc., the public has become demoralized, and the specialist has been placed in a position which he, if he be a right-minded man, is the last to claim. It would certainly do much to lessen the friction between him and his brother if there could be some well-understood principle of relative compensation which would be of universal application. In general, it may be said that most practitioners are on good terms with most specialists. Personal friendships do much to lessen the friction between those who are in a sense rivals, and it is a pity that those elements of character which underlie personal friendship can not be broadly extended to all the relations of those who practice the healing art.

Another from the same journal, under the following title, gives another phase of the subject:

HAWKING PHYSICIANS.

There may have been a time when the physician to some royal court found time and was permitted to engage in the sport of hunting with a hawk upon the wrist. Our present remarks do not apply to this kind of gaming, but to a less ennobling pursuit of crying one's wares upon the street or peddling them out for the highest price obtainable. Several of

our contemporaries have had much to say of late upon the subject of commissions paid by specialists to general practitioners for cases referred to them. That there exists any very considerable amount of such reprehensible practice we are not inclined to believe, but that reference cases are at times paid for on the one side and the dividend freely accepted on the other is undoubtedly true. More's the pity.

What has been called "bargain-counter" surgery, especially in the realms of abdominal and pelvic pathology, must have some existence in fact or one would not hear of it from so many different sources. The blame has been placed almost exclusively at the door of the specialist, but one correspondent touches the keynote, it would seem, when he says that "country doctors frequently go about from surgeon to surgeon, seeking the highest bidder." It would not be surprising if equal blame were to be attached to him who has the case to sell and to the one who is willing to buy. It was some years ago that many reputable surgeons in this city were shocked in their finer susceptibilities by a down East doctor who landed in town with six laparotomy cases, which he proceeded to farm out on terms most advantageous to himself. Many of the surgeons approached had not before heard of such shrewd, businesslike method being applied to human existence, and very properly showed the visitor the door. Undoubtedly these surgeons would pursue the same course to-day. It is at least to be hoped they would. Whether or not this hawkster succeeded in finding an operator sufficiently devoid of ethical honesty to offer the proper "divy" is not divulged. He may have taken the subjects to one of our neighboring cities, where so great a cry has gone up against the giving and accepting of commissions as to lead one to infer that the practice is much more prevalent than with us. Or he may have gone with his half-dozen protruding females back to his quiet New England village, and by operating upon them himself secured the whole of a smaller fee. Whatever may have been the outcome of the pilgrimage, the lesson must have been learned that because one man "sells" another does not always feel inclined to "be sold."

Among the worst medical sins are to be reckoned those of commission. Physicians who indulge in such practices must sooner or later come to grief, and it would be better that both sides take warning before the patients discover for themselves that their welfare is being bartered and that they are likely to fall into the hands of incompetents willing to overcharge in order to pay exorbitant dividends.

I have endeavored to give both sides of this question as far as I could by reading the opinions expressed by representatives of different localities, and will close with the statement that I am convinced that we are, to say the least, not above suspicion, and I greatly fear that almost every one of the different phases of this evil could be found to exist right here in our midst.

I have been approached several times, but have never allowed a full-fledged proposal to materialize; foreseeing what was coming I have bluntly shut the gentlemen up, feeling that such a proposition would be a personal insult to me as much as I would feel that I had insulted a man if I were the proposer.

The remedy to be applied is a "horse of another color," and I sincerely hope a feasible plan will be developed in the free discussion which I feel should at this time follow the introduction of the subject.

LOUISVILLE.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, March 10, 1899, the President pro tem., Frank C. Wilson, M. D., in the chair.

Gunshot Wound of the Stomach. Dr. A. M. Vance: This boy is thirteen years of age, and it was my intention to exhibit him before a recent meeting of the Louisville Surgical Society, at which the case was reported and another patient (Dr. C. C. Godshaw) was shown. (See March number of the Louisville Journal of Surgery and Medicine.)

The history is as follows: November 18, 1898, at eight o'clock in the morning this boy was shot with a Flobert rifle, just after he had eaten a full breakfast. The gun was in his own hands, and he had just been looking into the muzzle; it was loaded with a No. 22 long cartridge. Just as he lowered the weapon it was discharged, the bullet striking him midway between the umbilicus and tip of the sternum, one-half inch to the left of the median line. He immediately vomited the recent meal along with a great deal of blood. Six hours afterward I found him with great evidence of shock and loss of blood; pale, lips blue, pulse 130, feet and hands cold.

The mother consented to an operation, though the desperate chances were fully explained. Without loss of time, with the cottage kitchen as an operating-room, the abdomen was opened between the umbilicus and sternum, the bullet wound being about the center of the incision. As the peritoneum was opened fluid blood escaped in quantities, and the cavity seemed filled with clots. The history of his having vomited

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

blood made me seek the stomach first. A large wound was found about the middle of the anterior wall, evidently the bullet having bitten out a piece and continued on downward, as proven by the further exploration. This wound was closed with No. 1 plain catgut. No wound of exit in the stomach could be found. There was a buttonhole wound through the edge of the left lobe of the liver which was not bleeding. There was no wound of the colon. Reading of the ileum was then done, the blood and clots being removed as we progressed, constant douching being employed by a small pitcher. About three feet above the cecum three wounds of entrance and three of exit were found and carefully sutured as they appeared. The wounds of exit were large and ragged. Two wounds of the mesentery near the gut were also cared for. One of these had severed a large artery, which was bleeding actively and evidently had supplied most of the blood found in the cavity. The great omentum had three or four hematomæ produced by the small bullet having grazed or passed through its meshes.

By this time the boy was in pretty bad shape, and the wound was closed rapidly with large gauze drain wrapped in rubber tissue inserted at the upper angle. The drain was removed at the end of twenty hours, and after starving for three days and being supported actively with strychnine and nitro-glycerine, this boy did well, and at the end of sixteen days was about well, the only mishap being that the night after the stitches were removed he tore the wound open; being a rather unruly chap, I think he undertook to scratch too vigorously.

I had no idea when I finished the work but what the boy would die promptly. The result in this case should encourage us to operate in almost any case that presents within a reasonable time after the injury. This is my seventh operation and third recovery after extensive gunshot wounds of the stomach or intestines.

My only object in presenting this boy is to show the result of the operation in so desperate a case. You will observe that he has a considerable prominence of the stomach on account of the wound having been torn open after the stitches were removed. There does not appear to be a gastric hernia, but simply a stretching of the fascia which allows the prominence of the stomach which is present. After the wound was torn open a large abscess formed seemingly beneath the skin and discharged at the lower angle of the wound. I had not seen the boy for some time until this afternoon. He has a large cicatrix

which you will see has healed by granulation. He has regained his usual good health, and says he now feels as well as he ever did in his life.

The paper of the evening, "Where Are We At?" (a discussion of the commission evil), was read by Ap Morgan Vance, M. D.

Discussion. Dr. Wm. Bailey: I do not feel that a paper like this should be allowed to pass without some consideration. It is a question of great importance, as it pertains to the honor of the profession. I believe that honesty is the best policy, and certainly no man of honesty will want or receive a fee for any service that he has not rendered. I see no reason in the world why the general practitioner, when a case comes under his charge, and he gives it the necessary attention to determine first whether it is a case within his realm or that he can successfully treat it, if he does it honestly and conscientiously, whether he does the patient any good or not, I see no reason why he is not entitled to a fee for the time and attention given. And any fee that any man ought to receive he ought to be willing to make it in the regular charge to the patient. I can not conceive how any honest man would receive a fee from the specialist that he would not be willing for the patient to know that it is coming to him, and that it is right by virtue of the time and attention he has given to the case. It is a mistake to have people think that the doctor is only entitled to pay for service that does good. I think we would be deprived of a large source or part of our revenue if we limited it to cases where we actually do the patient much good. We even are entitled to a fee perhaps when the service has been an injury, provided it was the best we knew how to do. As long as a case is under my charge, and I am going to give it attention, I am always willing to let it be known that a charge will be made, and shall endeavor to collect a suitable fee according to that service. I can not conceive of any circumstances under which I would feel that I had any right to expect or to receive from the specialist any part of a fee for service that he should render the case.

I do not believe it always necessary that a patient referred by the general practitioner to the specialist should pass entirely out of the hands of the general practitioner. I believe this would be a mistake. We send our patients, for instance, to a distance to seek aid that we are not able to give them. The specialist under such circumstances could not continue the service that may be needed beyond what can be made

by his operation; and it would be perfectly proper, in my judgment, for the general practitioner to continue the supervision.

So far as the operation itself is concerned, and the immediate supervision of the case at the time of the operation, I am satisfied that the general practitioner should give way to the specialist, and not embarrass the surgeon in the immediate management of the case because of any lien or interest he retains; but when it passes beyond the field of the specialist again, by right he ought to give the case back to the general practitioner who has referred it.

These are my convictions, and I think if we would pursue such a course we would not find any difficulty; if we would do unto others as we would have them do unto us we would have no trouble. A course like this would remove much of this difficulty, and if the practices indicated by Dr. Vance's paper are prevalent, it is an alarming state as to the *morale* of the profession. I am sorry to hear it intimated that even in this part of the country the evil exists to the degree suggested. Personally I have known of no such thing.

Dr. H. H. Grant: It has so happened with me that I have had no one ever to approach me, as the paper read by Dr. Vance indicates is the habit among general practitioners, to ask for a division of the fee. I think it is scarcely the expectation of any of my friends in the profession from out of the city to bring patients here with the expectation of a division of the fee. The greater part of what is contained in Dr. Vance's paper must have been the result of an appeal to specialists who do office practice, rather than to the general surgeon. I can scarcely see how any self-respecting surgeon could entertain for a moment a proposition to do an operation and regulate the charge for it with the expectation of dividing his fee with the man who brings the patient.

I think in case a general practitioner has had under his care a patient for a considerable time, who subsequently needs surgery, that it is neither unwise nor improper for the general practitioner's bill and the surgeon's bill to be presented together, with the definite understanding on the part of the patient that both bills are to be paid in one—that the bill includes charge for the services of both; then such division may be made between the surgeon and general practitioner as they may choose to make. I would be distinctly opposed to any conditions of trade prior to the operation, or of paying anybody a commission upon business, or of any intimation under such circumstances that special concessions would be made; but after the patient comes directly to

the hands of the surgeon through the aid of any general practitioner, and a good fee is paid for the operation, I can not see any reason why, if it appears wise, that the bills may not be presented together, and that such division should be made as may be indicated by the personal relations of the two physicians concerned. In the letter read Dr. Morris says not infrequently where he has collected a small fee he has occasionally divided it with the general practitioner. It is a question entirely of the personal relations between the two.

We all appreciate the facts as Dr. Bailey has related them. Our first duty is to the patient; this applies with equal force to the surgeon, specialist, or general practitioner. I do not believe there is a doctor in the city of Louisville, or a reputable man anywhere, certainly no member of this Society, who does not first consider the welfare of his patient, and many of us work earnestly and faithfully for the alleviation of suffering without the expectation of any reward. When it comes to the point of actual division of the fee obtained from any patient, in my judgment the only way in which it can be done is as I have outlined. That this can be wrong in any way I do not see; but any thing that tends to interfere with either the benefits accruing to the surgeon or the general practitioner, or any thing that interferes with the welfare of the patient, needs condemnation.

Dr. J. A. Ouchterlony: I wish to say first, in answer to Dr. Grant, that I do not see any propriety in the bills being sent in conjointly unless the two medical men are in partnership. The mere fact that they have been in the case together seems to me no reason why they should send in a joint bill. The physician should send in a bill for his services, and the surgeon should send in a bill for his services. Each should be paid for the service he has rendered and no more. I can not conceive why the physician should receive part of the fee paid the surgeon for services rendered by him simply because the case has been referred to him. But the main point in the paper seems to be that there is a practice prevalent of physicians being paid by specialists to whom they have referred cases. I am very sure that this practice is somewhat prevalent in this part of the country as well as elsewhere. A number of years ago a physician who has now passed away said to me, "What do you get from surgeons when you send them cases?" I asked what he meant, and he said: "Why, don't you make them pay you when you send cases to them?" I replied that I most assuredly did not. He then remarked, "They ought to be made to

pay; they get much bigger fees than we do." Well, I said, that is their good fortune; if we want to get equally large fees we must practice surgery. That was the first time the subject had ever been brought before me in that bold way. That country physicians hawk their patients about after bringing them to the city to be operated upon I am well aware. How often it is done I can not say, but I have known of instances where the country doctor would bring a patient to a friend of mine, then all of a sudden the doctor and his patient would disappear and turn up in the office of some other surgeon. The first question of the country doctor is, "What are you going to charge?" When the fee was mentioned the rural physician would say, "How much is there in that for me?" The surgeon referred to was not a very good financier, though a very honest medical man, and said "Nothing." The end was just what I have mentioned. Now, it is common for the country doctors to try and make the consultant, whether he be physician or surgeon, cut his fee down as far as possible, and then to say, "I will pay it." That has happened to me. The doctor paid me the fee. What is charged the patient afterward in such cases I do not know. Of course I take it for granted the doctor did not charge the patient any more, but there was a possibility that he might have done so. It is very deplorable that such a thing should happen, but I do not see how we could legislate such a state of things out of existence. The only way is to elevate the *morale* of the profession by seeing to it that those who are already in it and occupy high places should set a good example, and as far as possible exclude men who are applicants for degrees from entering the profession unless we are satisfied that they are men of good moral character. Poverty is very demoralizing, and often men will do things under the distress of poverty that they would not do otherwise. Still we can not make them honest by legislating any more than we can make them virtuous, and I must say that I do not see where the remedy is to be found except in that rather remote, indefinite way that I have mentioned.

Dr. J. G. Sherrill: There are three things to be considered in this connection, namely: the surgeon or specialist, the physician, and the patient. The physician is many times the patient's adviser and friend, and whenever you commence to introduce the commercial spirit in matters of this kind the relations between the patient and physician are materially changed, and you are bound to lower the plane of the profession. If the physician turns his patient over to a surgeon or

specialist, then if the surgeon operates upon or otherwise treats this patient, he is in his turn worthy of a fee.

If the surgeon includes in his bill sufficient to cover the amount due the practitioner without notifying the patient, it places him in a very unfavorable position; the patient goes away with the idea that the surgeon has overcharged him; that he is demanding more than he really ought to receive for his services, while the surgeon is not getting any more than he should, if as much, and the physician gets a fee without the knowledge of the patient, the physician being paid for his attendance upon the case out of the amount collected by the surgeon. In this way the surgeon would often either rob himself or be compelled to rob the patient to present the practitioner with a commission. If this practice should extend and become general, you can readily see how it would be looked upon by the patient; he would have no respect either for the surgeon or the practitioner. If the patient were to know that his physician was guilty of such a practice he would certainly send for another doctor, and if any surgical work were needed, if the surgeon previously employed were known to be guilty, he would certainly send for another surgeon; and this is exactly what he should do. If this practice becomes at all general the people are certain to know it, and great harm will be done, not only to the individual, but also to the profession. I see only one way to remedy the evil, and that is for every honest professional man to frown upon the practice, and when they have proof of the existence of such a state of affairs, I believe it to be their duty to report it in open meeting.

Dr. L. S. McMurtry: Certainly the subject was presented by Dr. Vance in such a manner as to place all sides of it before the Society. I am satisfied that the evil of paying commissions for the referring of cases is more common in Eastern cities than it is with us. I have had a rather extensive experience in special practice, and a considerable proportion of the cases I have are referred to me by other physicians. Individual experiences may give some light as to the condition of affairs in our own bailiwick, and I have pleasure in stating that I have never had but one proposition to pay a commission. I had the physician in the case write me a letter, stating that he had a case of a certain character that he was contemplating referring to a specialist, and asking point blank how much I would allow him of the fee if he would refer the patient to me.

Two years ago I met in Europe a distinguished surgeon of one of

our Eastern cities. We were conversing upon various phases of professional life, and he told me that this matter of paying commissions for the referring of cases was very common in his city; that whatever I might think of it, he said the surgeon was compelled to do so, and he said that he did it. He is a man of distinction in the profession. I was very much surprised, and it led me to believe that the practice is very much more common in the large cities of the East than it is with us here. I believe that the practice is exceptional here, though I have good reason to know, from certain methods of observation suggested by Dr. Ouchterlony, that such instances do occur here, but I think they are rare.

There are other phases touched upon by Dr. Vance that are great evils, and they should receive consideration from gentlemen engaged in special lines of practice, and I know that what I am going to allude to now is familiar to the Fellows; that is, that the practitioner who refers the case to the specialist is directly interested in serving his friends, among whom he practices, in having charged the lowest fee for the specialist's services. With a desire to befriend his patient, he is led to make statements which are not exactly correct. This is done with the idea that the specialists get larger fees than they really do. Many practitioners think that specialists in every department get larger fees than they do. They have an idea that we charge according to some standard that makes no discrimination, consequently they begin to prepare for it as a service which they imagine they should render to the people who are under their care. This is likely to work a great injustice, because a man in excellent circumstances, one who is able to pay a regular fee, such a fee as would be fair and just to the specialist, may be pictured by the practitioner as unable to pay a reasonable fee, and in this way the pay is not compensatory for skilled work.

In regard to the paying of commissions downright—simply having it understood with certain physicians that if they will bring their surgical cases to certain surgeons they will be paid so much for each one—I do not believe that occurs with us here except in rare instances. In regard to the charges of the physician and those of the consulting surgeon or specialist, I agree with Dr. Bailey that each one should charge his own fee and collect it. This is the better policy; it is better for both the physician, specialist, and patient; it makes a better impression, and every thing that is in the way of perfectly open, frank, and straightforward dealing with the patient is the best policy. Naturally

every patient, and almost every physician who has a patient to refer, wants to know beforehand what the surgeon's charges are going to be. It is puzzling to know what to say to them. You do not know what the case is, and the physician himself, perhaps, has only a general idea as to whether any operative treatment will be required, yet he wants to know before the patient is referred to you what will be your charge. One single visit may be required, or the case may require a protracted course of treatment; it may be an operable or an inoperable case; no one can say before the patient is examined. Whenever it is possible after seeing the patient, and the course of treatment has been determined upon, it is best to state just what the charges will be.

If the surgeon or specialist cultivates the commission business, it will become known, not only to his colleagues but to patients. The practice is indefensible, and is certain to injure the reputation of those who engage in it. When the physician and surgeon, the physician and consulting physician, or the physician and the specialist are working jointly, each should be paid for his services in proportion to the means of the patient, and their bills should be rendered separately; every thing in connection with the transaction should be open and above-board, and it will be better for the reputation of the profession and the individuals connected with it.

As to the remedy for the evils which are said to exist, I do not know that any thing can be said more than has been stated by Dr. Ouchterlony. The cultivation of a professional spirit and opposing commercialism and insisting upon honest business methods is the only way to do this. The cultivation of a high order of professional sentiment and the hearty co-operation of physicians, surgeons, and specialists will do more toward correcting the evils that exist than any thing else. The interchange of views upon this subject is certain to do much good. It will have a tendency to elevate the medical profession in all its business aspects.

Dr. James B. Bullitt: The evil presented by the essayist is so prevalent that I can only believe that those who have not been made aware of it are such as live so far above the clouds that they have not come in contact with the ordinary things of earth. The whole thing hinges upon honesty, and I believe that Dr. Vance in his blunt honesty has struck a very hard blow which should make a dent, but whether the reverse side of the shield will be any better for the dent which he has made I am unable to say.

It takes two parties to perpetuate an evil of this kind, and if the surgeon or specialist is unwilling to accept a case and in return pay commission therefor, such a practice of course could not exist; but this certainly has not been the case. Perhaps we would as well not speak of where such a practice does or does not exist, but speak of the section in which we live; it is a matter quite patent to all who have knowledge of such dealings that there are men who will not only divide fees, pay commissions, etc., but who will make direct overtures for the reception of such fees on the ground that if the patient were sent to others, a division of the proceeds would not be allowed.

Division of the fee as spoken of by Dr. Grant might be regarded as proper under some circumstances, although, as indicated by the remarks of several of the gentlemen, I believe it would be an impolitic arrangement; it would be an arrangement which would allow a man to indulge in this practice which we are trying to avoid. In much that has been said to-night and in the papers quoted by Dr. Vance we are led to believe that the fault lies not so much with the surgeon or specialist as with the general practitioner. This is perhaps not true. While the practice may be encouraged on the one hand it is also permitted on the other, and therefore I believe it would be wise to cast the beam out of our own eye before attempting to cast the mote out of the eye of the general practitioner. As regards the ultimate remedy for such an evil, of course, as suggested by Dr. Ouchterlony, it does not exist. Medical legislation as proposed by Dr. Morris would be absolutely inadequate; it would simply direct attention to the evil, and might be productive of good in this way. Such a paper as Dr. Vance has read is calculated to do the same thing; attention should be called to these practices, the searchlight should be turned upon them, with the hope that the evils will be discontinued.

If a division of the fee is made, it always results in detriment to the surgeon and to the financial gain of the physician rather than always to the detriment of the patient. I mean by that, it is a very much easier matter for the surgeon to take a certain amount out of his pocket and give to the practitioner in a case of this kind than it is to make the patient pay a larger fee. We know it is a difficult matter to get patients in this section of the country at least to pay large fees, fees which we believe our services are justly entitled to, and if we are to further divide this fee with the general practitioner, it works to the detriment of the surgeon always.

Dr. William Cheatham: In twenty-two and a half years of practice in the city of Louisville, I have never had the commission proposition made to me but once. In this instance a gentleman from a distance wrote me regarding a certain case, asking what his commission would be. In reply to my letter refusing to consider the matter, he gave a very satisfactory explanation, and I believe he was sincere in it. He has been a good friend of mine since. I know such practices exist, but this is the only experience I have had.

Dr. H. A. Cottell: It seems to me that the evil can not be very prevalent or more of us would know something about it. In all my experience with specialists—and I am a sort of half specialist myself—I have had such a proposition made to me but once. A medical gentleman sent a patient to me to be treated for some nervous affection, and suggested in return that a percentage of the fee collected would not be refused. I believe much of this sort of thing is going on among a certain class of doctors. They are, however, men who could not gain entrance to this Society; men who would be black-balled if they should apply for membership.

That the evil exists there can be no question; but I do not believe it exists in high circles; there ought to be a remedy, and the plan suggested by one of the writers of having the American Medical Association frown down upon it is a most excellent one. It has always seemed to me that we ought to have in Louisville a strong representative medical society that would fix the ethical aspects of matters of this kind, that could discipline its members if they broke over the rules, a society to which every reputable doctor of the city might belong and to which he would wish to belong. Such an organization as that could do a great deal in the way of correcting abuses such as those to which attention has been called. The spirit of commercialism is bound to enter our profession; we may hold ourselves above it, which we ought to do as far as possible, but it is in every line of business, and so long as medicine is considered as a business men will be found who would be willing to prostitute it for business purposes.

Dr. T. C. Evans: I am thoroughly in accord with what Dr. Bullitt has said, that the fault lies more with the surgeon and specialist than with the general practitioner. So far as the local condition is concerned, my experience is that the general practitioners who have a good business of their own are not engaged in dividing fees. The practice is almost entirely with what might be called shysters, who stand in

with some of the surgeons who stand high in the profession; these surgeons say to those on the outside: on all the cases you bring to me for operation I will give you a certain percentage of the fees collected. I have reason to believe that such things exist here as well as in the neighboring States. Only a short time ago I was in one of the towns of the central portion of the State, and a physician there told me of an offer that had been made to him by a Cincinnati surgeon. I was particular to ask him if only the gentleman in Cincinnati had suggested a division of fees, and he said the same offer had been made him from Louisville, namely: if he would send his patients to a certain surgeon he would get a proportion of every fee. Within the last year I was approached in a similar manner by a man who was recently graduated from one of the medical colleges here. He did not expect to practice medicine; by occupation he was a stock trader. He lived in the western part of the State. He came to me with the plain proposition as to what per cent I would allow him on business he might send me. I told him I would not give him a cent. He said he had been to see several surgeons who offered to give him twenty-five per cent.

In regard to Dr. Morris' paper, I should say that he is rather innocent, and he surely has not traveled over the city of New York. We all know that the commission evil has not only extended to the surgeon and general practitioner, but it even extends to undertakers as well.

Dr. Louis Frank: I am sorry to say that the practice of paying commissions does exist here. Probably those of us who practice surgery are more familiar with it than those who practice general medicine. But we all know that the practices outlined in Dr. Vance's paper exist. I believe there is hardly a surgeon in the city of Louisville who has not been approached in some manner for a division of fees. As to the cause which has brought about this state of affairs, I believe it is due to the active competition, the commercial spirit, which has invaded the practice of medicine, particularly among surgeons. This practice is not confined to one section of the country, certainly not to Louisville, though I know it does exist here from letters I have received from parties out of town; it is not an uncommon thing for general practitioners out of the city to write to the various surgeons and obtain prices upon work that is to be done, and ask what commission will be paid them for each case sent, etc. The entire blame for this state of affairs, the division of fees, from the first falls upon the surgeon himself. I do not believe it is so largely the fault of

the general practitioner, but equally so of the surgeon, and if there was less of the commercial spirit and more of the true professional spirit, this reprehensible practice would be entirely done away with.

Dr. J. M. Ray: I have never had any personal experience in the division of fees, but there is one phase of the subject that has not been touched upon with which I am somewhat familiar, and of which I have illustrations too numerous to mention. It is the custom which is prevalent in this part of the country for the doctor to write to two or three different specialists with reference to a patient and get their opinions, after giving a description of the case, and also getting their prices for certain operations thought to be required. Take operations about the eye, for instance enucleation. Say a patient desires that an eye be removed for the relief of some pathological condition; the doctor in charge writes to two or three men and gets their prices for such an operation. I have within the last two or three weeks had an experience of this kind in which a man wrote me to know what I would charge for a certain operation; in the letter he also stated that he had already written to two other gentlemen, and had their prices for the same work. In the letter he went on to say that he was a friend of mine, that the patient was a personal friend of his in whom he was much interested, and would like to know if I would not, through my personal relationship with him, perform the operation and take a smaller fee than the gentlemen who had previously been consulted with reference to the matter. I answered him very promptly that I would not under any circumstances perform the operation for him any cheaper than others had offered.

Another practice similar to that is where the doctor brings a patient to your office, and in the presence of the patient tells you that the patient is a personal friend of his, that he wants you to make the fee as small as possible, that he (the doctor) will pay it, and then after the service is rendered for the doctor to take you to one side and say that he expects you to charge what you think is right; that he will pay it and settle with the patient himself. And it has been my experience in two instances where I know that the doctor has charged the patient more than the fee he paid me at the office.

Another feature is that a doctor from a distance brings a patient to the specialist's office, and especially does this occur with those of us who are connected with medical colleges, where of course we are to a certain extent anxious to obtain a first-class quality of clinical material,

and the doctor being aware of this, will frequently bring patients who are fully able to pay a fee with the statement that they are unable to pay a fee, but are willing to present themselves before the class of students and have the operation performed. In the presence of the patient the doctor gives you a statement of the patient's financial standing, and under the circumstances you feel called upon to perform the operation at the clinic without charge. On several occasions I have heard afterward that the doctor's expenses, etc., were paid by the patient, and in fact I have been told that the patient paid the doctor a fee in addition to his expenses to and from the patient's home. Of course these are simply cases of imposition which the consultant is perfectly unfamiliar with at the time, an arrangement between the patient and the doctor to get the operation performed without the payment of a fee therefor. We are all possibly imposed upon oftentimes in this way, and the fault is not always with the doctor entirely but with the patient. I know patients are prone to go from one doctor to another, and they will tell you that doctor so and so charged them a much smaller fee than he really did. I know of many instances of this kind. I have been surprised, based upon information received from patients, that the doctor they mentioned charged such a small fee, which I knew was much less than he was in the habit of charging for the work in question.

As far as the commission evil is concerned, I have had absolutely no experience with it personally.

Dr. August Schachner: This is a very interesting subject, and all the points brought out by the various speakers are worthy of serious consideration. Personally, my views are those expressed by Dr. Grant, if I understand them correctly. One speaker criticised his position, intimating that it was perhaps a barrier behind which a lot of work could be done which was not exactly correct, and there is a little truth in that criticism. But after all we can not make any one honest, and our relations to one another, to patients, etc., depend upon our own honor and honesty, and it is in regard to this question as it is about all others, if a man has not much honor and honesty, he may practice almost any amount of trickery without being found out, at least for a time. We can not make any hard and fast rules which will apply to all cases. The first duty of the surgeon or the general practitioner is to his patient.

Again, upon this as upon all other ethical questions, sometimes the

man who talks the loudest, longest, and most eloquently against certain practices may be the one, if the truth were known, who may be subject to the severest criticism.

Dr. T. S. Bullock: It is impossible for any of us who practice surgery to deny a knowledge of the existence of the commission evil. My experience has been different from that of some of the speakers. The general practitioner has, in every instance that has come to my personal knowledge, been the active agent. Propositions have proceeded from him entirely. That it is an undeniable fact that these propositions are made, I know from personal experience, and, as Dr. Bullitt has said, the best evidence that they are accepted is that they continue to be made.

I agree with Dr. Bailey, that the remedy for this evil rests with the individuals themselves, and if every practitioner of medicine and every surgeon were actuated by a sense of honor and honesty, the evil would soon be stopped. If the individual's sense of honor is not acute, he will not live up to the ideal that we should all have.

I have had some experience with the commission evil, and the general practitioner has always been the one to broach the subject. We should all consider a proposition to divide fees a direct personal insult. I hope this discussion will do good in calling attention to the evil, which certainly exists to a larger degree than any of us are willing to admit.

Dr. T. L. Butler: My experience has been quite different from those whom I know have been in surgical practice for more than twenty years. Some of them have said that they have never been approached, others state that the commission proposition has been made to them once, etc. I have only been in practice nine years, and must say such a proposition has been made me many times.

One point made by Dr. Vance does not seem to have been discussed very much; that is, the evil of having runners out. I have had this feature to contend with more than any thing else. In two instances that have come under my personal observation within the last few months the runners have been the surgeons themselves.

Dr. A. M. Vance: I have nothing to say in closing the discussion except to thank the members of the society for the reception the paper has received, and to express a delight at the trend of the discussion, with the hope that it may be of benefit to those who may be fortunate enough to read it.

LOUIS FRANK, M. D., *Secretary.*

foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Influenza; The Croonian Lecture; The Sale of Condensed Milk; What the Princess Wanted; A New Colony for Epileptics; Lady Inspectors; New Medical School Buildings; Army Nursing Sisters; Additions to Great Ormond Street Hospital.

Influenza is pursuing its course as during other visitations. Beginning about December, it gradually increased in violence until the end of February, since when it has slowly subsided to its normal condition. The deaths in London due to influenza rose until the concluding seven days of last month, when they reached the total of one hundred and thirteen. The general death-rate of the metropolis during the same seven days was 22.1; Brighton, 16.9; Croydon, 13.1, and West Hams, 19.8.

The "Croonian" lecture, which was this year delivered by Dr. T. Burdon Sanderson before the Royal Society, is of quite respectable antiquity. An annual discourse having for its subject the physiology of motion was originally propounded by Dr. Croone in 1684, and it was in 1701 carried into effect under the will of his widow, Dame Lady Sadleir. Both the Royal Society and the Royal College of Physicians share property under the lecture trust, which at one time included the rent of the King's Head Tavern near Lambeth-Hill. The whole property has gone up considerably in value since 1885, so much so that instead of a fee of £3 then payable, the lecturer now receives about £50, and this only represents one fifth of the trust, the amount the Royal Society may claim. This year Dr. Sanderson chose as his subject "On the relation of motion in animals and plants to the electrical phenomena which are associated with it."

A deputation from a number of municipal authorities have waited upon the President of the Board of Agriculture and urged the necessity of legislation being introduced to compel persons manufacturing or importing condensed milk to state on the outside what quantity of the milk contained therein it would be necessary to use to obtain the full benefits derivable from a pint of new English milk. The President in reply said the suggestion that when the public bought the article they should be made aware of what they were purchasing was a safe line for the Government to take, but in asking the Government to protect the public against themselves by conveying to them certain information as to the nutritive qualities of various articles of food, a heavier burden would be placed upon them than was perhaps realized.

The following is a copy of a letter from a well-known Shan princess to the medical officer in charge of one of the cantonments in the Shan States: "Kindly supply me the under mentioned medicines by bearer, as I am unwell, being fell down from an elephant and oblige. One does of smelling salt, one does for cureing headache, one does for cureing the pain at neck."

The County of Cheshire is taking up in earnest the providing of a village colony for epileptics, an estate of four hundred and fifty acres at Sandlebridge near Kuntsford. The establishment will consist of villas, gardens, and farm buildings, grouped round the social hall and central administrative buildings; picturesqueness is to be made a feature of the scheme, the idea being that the colony will have the appearance of a real village rather than that of a scattered and straggling institution. The whole scheme is to be carried out by voluntary contributions.

Some time ago the authorities of Southwark made a new departure in appointing a female sanitary inspector. The venture has turned out so successful that it is now intended to appoint another lady inspector, whose duties will more particularly include the inspection of workshops, especially domestic workshops. The salary of the new officer commences at £110, rising by annual increments of £10 to £150 per annum.

According to the annual report of the Cremation Society of England, there have been in the past year two hundred and forty cremations at Woking, an increase of sixty-seven, or forty per cent over the previous year. At Manchester sixty-two bodies were cremated, at Glasgow twelve, and at Liverpool twenty-seven. The president at the annual meeting of the society traced its history during the twenty-five years of its existence. With regard to the future he considered the reform of the system of registration of death was the most important point of their policy. The society hope shortly to construct a completely equipped crematorium in the neighborhood of London and to induce the Local Government Board to authorize cremation in all cases of death by contagious disease. The society congratulated itself on the fact that the Home Office was recommending that clauses giving power to erect crematoria should be inserted in municipal bills.

The governors of the London Fever Hospital are able to state that fever in London has been steadily decreasing for the last three years, and for the first time for several years the London Fever Hospital in 1898 was able to comply with all demands made for admission. The death-rate in the institution has been reduced to 1.5 per cent.

In connection with the Middlesex Hospital new school buildings and laboratories have been completed and form the most recent and one of the best equipped additions to institutions for medical instruction in London. The walls and floors of the buildings are made of smooth, non-absorbent surfaces, easily cleaned. The dissecting-room, about seventy-five feet long is situated at the top of the building, lighted from above, and ventilated by means of electric fans. Its glazed brick walls and its terazzo floor with

rounded angles and its spacious cubical area make it as healthy a place as any of its kind. The tables are made of glass and iron. There is also a dark-room for photographic work.

It is proposed to considerably increase the number of army nursing sisters; each sister must have three years' training at a Civil Hospital and six months' probation in the Army Nursing Service before final appointment. A private in the Royal Army Medical Corps receives instruction at Aldershot for five months, and after that he is attached as a supernumerary to a large military hospital to learn nursing and ward work, and he remains there till efficient. The education is systematically continued as long as he is with the colors. All the men are available for nursing duties and perform them in turn.

The Hospital for Sick Children, Great Ormond Street, has utilized the adjoining structure of the old Catholic building, the Hospital of St. John and St. Elizabeth, as quarters for the nursing staff; each will be provided with a small but well-ventilated bedroom. The sitting-room is a beautiful apartment, remarkable for its fine old dado and richly carved over mantle and decorative panel bearing the eight-pointed cross of St. John.

Dr. Manson will next month commence a course of lectures on Diseases of Tropical Climates; they will be illustrated by clinical cases and by demonstrations of parasitic organisms.

LONDON, March, 1899.

Abstracts and Selections.

RESECTION OF THE LIVER.—Terrier and Auvray (*Rev. de Chir.*, September, 1898) have collected forty cases of hepatic tumor in which laparotomy was performed, either for the relief of urgent symptoms or for the removal and radical cure of the disease. In two of these cases the operation was practiced simply with the object of remedying the results of compression of the bile ducts, cholecystostomy having been performed in each instance and no attempt made to extirpate the hepatic growth. In eighteen of the thirty-eight cases in which an attempt was made to perform a complete and radical operation, the tumors were of a malignant nature. Of the remaining cases, more than half of the whole number, in which there seemed to be no risk of relapse or generalization of the disease after the operation, three presented angiomatous tumors, three tumors the nature of which was not thoroughly determined—non-parasitic biliary cyst—and nine syphilitic tumors. In six cases death occurred as the result of the operation, having been due to hemorrhage, to septicemia, or to shock. Septicemia, it is pointed out, may be prevented by observation of the rules of a rigorous asepsis; and hemorrhage, which, however, rarely occurs, can in most instances readily be avoided by practicing the latest and most improved

methods of operation and by attention to the new plan of intrahepatic ligation. The remote results of operations for the removal of hepatic tumors have been much less unfavorable in cases of malignant than in those of non-malignant disease. In most instances relapse or generalization of malignancy occurs after a brief interval. Some few instances, however, have been recorded in which the patients remained free over intervals varying from two to three and a half years.—*British Medical Journal*.

POST-EPILEPTIC ALBUMINURIA.—Galante (*Rif. Med.*, April 26 and 27, 1898) has examined the urine of sixteen epileptics (14 male and 2 female) free from cardiac or vascular lesions, with a view to determining the presence or absence of albuminuria after an attack. The urine was withdrawn by catheter immediately after an attack, and the albumen estimated quantitatively by Scheier's method. In every case albumen was found, varying from 2.04 g. to 0.25 g. per cent. In two cases, after very violent attacks, a few hyaline casts were seen. The albuminuria lasted from four to twelve hours. If there had been pre-existent albuminuria the amount was always increased after a fit. There was a constant relation between the amount of albumen and the amount of indican observed in the urine. Assuming that albuminuria is due to some renal epithelial change of a temporary and fugitive nature in epilepsy, the author points out several factors in the epileptic attack likely to induce such changes in the renal epithelium—for example, the circulatory disturbances caused by the convulsive spasm of the thorax, the increase in autotoxins found in the blood, the intense muscular work done in the fit, and lastly the concentration of the urine from excessive perspiration.—*Ibid*.

HYPEREMESIS GRAVIDARUM.—Klein (*Zeits. f. Geburtsh. u. Gyn.*, vol. xxxix, Part 1), after reviewing the theories of various authors as to the etiology of the condition, and the different lines of treatment advocated, sums up in the following conclusions: (1) With Kaltenbach and Frank the term should be limited to those cases in which the vomiting is set up and kept up by the pregnancy, and the patient's nutrition suffers. (2) The reason of the hyperemesis in Kaltenbach's restricted sense is to be sought in a neurosis (Ahlfeld) or hysteria. (3) In the treatment of hyperemesis of the first and second degrees dietetic treatment by the limitation of nourishment to liquids, with mental and bodily rest, is sufficient. (4) If treatment at home is not successful within a few days, treatment in an institution must be proposed. (5) If the vomiting does not then stop, the patient must be transferred to an institution. (6) Local treatment (with the exception of the treatment of dangerous complications, such as retroflexion of the gravid uterus) and treatment by drugs and suggestion, are superfluous. (7) In hyperemesis of the third degree the artificial induction of labor is occasionally required. (8) To avoid this the earliest practicable treatment of the hyperemesis in the first and second stages is necessary.—*Ibid*.

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THE UNIVERSITY OF LOUISVILLE—MEDICAL DEPARTMENT.

The sixty-second annual Commencement of this school took place in Library Hall, Monday afternoon, March 27, 1899. In the absence of Hon. James S. Pirtle, President of the Board of Trustees, the degree was conferred by the Hon. T. L. Burnett, Vice-President.

The class valedictory was delivered by John N. Sebastian, M. D., of Kentucky. The alumni address was by T. B. Greenley, M. D., class of 1846. The faculty valedictory, on the Life and Character of the late Prof. David W. Yandell, M. D., LL. D., was delivered by Prof. H. A. Cottell. The class valedictory and the alumni address appear elsewhere in this issue. The eulogy on Professor Yandell will be in our next.

The degree of Doctor of Medicine was conferred upon the following named gentlemen:

Allison, Hendery, A. M., . . . Indiana.
Bloch, Leo, Ph. B., ... Kentucky.
Fox, Perry W., M. D., ... Tennessee.
Green, Frank Karrie, Ph. G., Kentucky.
Hamilton, Guy Wheeler, A. B., New York.
Kelsall, Oliver Holt, A. B., . . Kentucky.
Mark, Ernest G., A. B., . . . Kentucky.

Mitchell, James J., M. D., . . . Illinois.
Prichard, Carl L., ... Kentucky.
Sebastian, John Needham, B. S., Kentucky.
Smith, Lindsey Gillespie, A. B., Texas.
Smith, Fisher Elmus, ... Colorado.
Wilson, Dunning S., Ph. G., . Kentucky.

The hospital appointments were awarded as follows: Louisville City Hospital, Oliver Holt Kelsall, A. B., M. D., of Louisville; Sts. Mary and Elizabeth's Hospital, Guy Wheeler Hamilton, A. B., M. D., of New York.

The exercises were conducted with the usual esthetic accompaniments of music, eloquence, and flowers, and the youngest brood departs with *Alma Mater's* fondest wishes and best hopes.

Notes and Queries.

THE OPERATIVE TREATMENT OF GOITRE.—Kocher (*Correspondenzblatt für Schweizer Aerzte*, No. 18, 1898) publishes the results of six hundred cases in which thyroidectomy has been performed at Bern in the course of the past three and a half years. Of these cases four hundred and fifty were treated by the author himself, and the remaining one hundred and fifty by his assistants. This is an additional report to one of one thousand cases published early in 1895. In accounting for the large number of thyroidectomies performed for the removal of goitre since February, 1895, Kocher asserts that thyroid extract is not more effectual than iodine as an internal agent, and that consequently the use of the former in the treatment of goitre has not diminished the proportion of cases needing operative interference. Thyroidectomy, which in Kocher's practice has been found an almost absolutely safe operation in uncomplicated cases of simple goitre, is held to be indicated by excessive development of nodular growths in the thyroid gland in all instances of cystic disease, and whenever there is a suspicion, however slight this may be, of malignancy. The chief indication is dyspnea, due to compression and consequent stenosis of the trachea, a condition which can not be remedied or even relieved by medicinal treatment. As the most serious and, in uncomplicated cases of goitre, the only danger attending thyroidectomy is the fatal action of a general anesthetic, Kocher during the last two years has used cocaine locally on all patients submitted to this operation, with the exception of young children and very nervous or sensitive subjects. The following are dwelt upon as important points in the author's method of performing thyroidectomy: A curved skin incision across the front of the neck, the convexity of the curve being downwards; the sterno-hyoid and sterno-thyroid muscles are detached at their lower extremities from the sternum, and not divided high up in the neck, while the omo-hyoid is left intact; the enlarged gland, after division of its fibrous capsule, is raised from the trachea and drawn out of the wound, so that the thyroid vessels are put on the stretch and freely exposed before the application of ligatures; the isthmus, after its exposure, and after ligation of the vessels running transversely along its upper and lower borders, is forcibly compressed by forceps, so that the colloid material is forced out and the isthmus is reduced to a narrow, fibrous band. Since 1883, when it had been proved by both surgical and pathological experiences that total removal of the thyroid gland is certain to result in the development of the condition called cachexia strumipriva, Kocher has not, except in case of absolute necessity, performed a complete thyroidectomy. Since he has attended to this rule, and has endeavored, even in the most

unfavorable cases, to save some portion, however small, of the diseased gland, he has met with cachexia strumipriva in four cases only out of 1,500 in which thyroidectomy had been practiced. In the rare cases in which it may be found necessary to remove the whole of the gland, the threatening cachexia may be averted by the administration of thyroid extract. The series of 600 cases with which this paper deals includes eighteen cases of malignant goitre, eleven cases of strumitis, and fifteen cases of Basedow's disease. In six of the eighteen cases of malignant disease thyroidectomy had fatal results. The operation was also fatal in two of the eleven cases of strumitis, and in two of the fifteen cases of Basedow's disease. Of the remaining 556 cases in which thyroidectomy had been performed for the removal of ordinary colloid goitre, one only was fatal, and in this single case death was the result, not of the operation itself, but of the action of chloroform. The high death-rate after thyroidectomy for malignant goitre is due, Kocher states, to the complicated nature of such cases and the frequent necessity for removing portions of the trachea and esophagus, and also of such important parts as the internal jugular vein, the common carotid artery, and the spinal accessory, pneumogastric, and sympathetic nerves. The dangers attending excision of the thyroid gland in cases of strumitis and of Basedow's disease are attributed in the former to suppuration of the diseased gland and septic infection, and in the latter to the faulty general condition of the patient.—*British Medical Journal*.

Govt.—Schmoll (*Centralb. f. inn. Med.*, October 22, 1898) discusses the theory of this disease. He says that one point in Garrod's views as regards gout remains true, and that is the richness of the blood in uric acid during the attack. The necroses of tissue in which uric acid crystals are deposited constitute a new fact discovered by Ebstein. Some authors have shown that gouty patients are unable to maintain a nitrogenous equilibrium in spite of a sufficient supply of calorics and an adequate nitrogenous diet. It is not known in what form the nitrogen is retained. Before and during the attack of gout a nitrogen deficit accompanies the nitrogen retention. Garrod has endeavored to explain gout by a diminished excretion of uric acid, Ebstein by an increased formation, and Pfeiffer by an increased production, together with something else. Reliable analyses have shown that the excretion of uric acid on the gouty varies within normal limits. For a long time uric acid was looked upon as an incomplete oxidization product; now it is generally believed that it is derived from nuclein and the alloxan group. Feeding with nuclein or with thymus has been shown to increase greatly the excretion of uric acid. Uric acid arises through the oxidization of the alloxan group: (1) Cells perishing in the body leave nuclein, from which uric acid is derived. (2) Uric acid is also derived from the alloxan group supplied, such as theine, caffeine, etc. (3) In the gouty deposits of uric acid may be dissolved, and so increase the excretion of uric acid. It is very difficult to estimate the last-named factor. As regards the

second, feeding with pure nuclein and thymus shows that about one fifth of the allaxan bases thus supplied are oxidized into uric acid, and the other four fifths disappear in the body. The latter may be built up into nuclein, or the alloxan bodies may be split up in the alimentary canal. Another, and the most probable view, is that the bases are absorbed and are converted into uric acid, which latter if not excreted by the kidney is changed into urea. It is impossible yet to say whether the uric acid formation is increased or diminished in gout. In a gouty patient fed with thymus the excretion of uric acid was increased from 0.5 to 1.3 g. This would show that the richness of the blood in uric acid was due to increased formation. This increased formation would appear to be due to increased cell destruction. Pfeiffer and others have shown that during the attack of gout an increased amount of uric acid is excreted. The necrotic processes described by Ebstein will explain the cell destruction with escape of nuclein as mentioned above. The cause of these necrotic processes is as yet unknown. The author would look upon them as caused by the retained nitrogenous metabolic products. The questions remaining to be solved are: (1) What substances are retained in the body in gout? and (2) under what conditions are they retained?—*Ibid.*

PATHOLOGY OF SYPHILIS.—Adami (Montreal Medical Journal, June, 1898) discusses the nature of the different stages and forms of syphilis. His conclusions may be summed up as follows: (1) In certain cases there may be an absence of the primary cutaneous or epithelial manifestations of syphilis. (2) Individuals may fail to present either primary or secondary symptoms that are recognizable, and yet eventually develop definite tertiary lesions. (3) When the subject is relatively insusceptible, it is possible that the disease may be limited to the primary cutaneous lesion, not followed by secondary lesions. (4) In syphilis, like tuberculosis, the congenital form of the disease begins at what may be termed the secondary stage of the acquired disease—for instance, the stage of general dissemination of the veins. (5) Syphilis under proper treatment, if not a self-limiting disease, is at least one which can be healed, so that many of the lesions recognized as tertiary are truly the indications of the old healed syphilis and not signs of progressive or latent disease. (6) If the disease has not completely died out and remains latent, the resistance of the tissues of the organ is such that in most cases it does not tend to light up again; there is so considerable a local reaction that the infection and consequently the spread of the process tend to remain strictly localized, and the germs do not become disseminated through the blood. Thus, neither the blood nor the secretions contain the virus. (7) In a very small number of cases the reaction of the tissues may be so lessened, and the virus retain or gain so high a virulence, that either it causes ulceration, or in other ways becomes disseminated and capable of causing infection even late in the tertiary stage. (8) In the liver of a newborn infant presenting externally evidence of the

secondary stage, there may be several varieties of lesions: (a) Well-defined gummata; (b) miliary gummata with generalized fibroid changes affecting circumscribed areas; (c) miliary gummata and fibrosis affecting the whole organ, which is thus enlarged; (d) generalized atrophic cirrhosis without much evidence of gummata, but associated with icterus, edema, etc., the liver being granular and contracted. Hence the changes in the liver in congenital syphilis resemble the tertiary rather than the secondary stage of the disease. (9) The liver of acquired syphilis may present two conditions: (a) Cicatrices and fibroid changes which are indications of a previous syphilis now healed; (b) the lighting up again of an obsolescent syphilis from old foci in which the virus has remained latent. (10) Progressive syphilis is characterized by the same succession of pneumonia, whether it be studied a few months or many years after the primary infection. Anatomically and histologically there is no valid distinction to be drawn between secondary and tertiary syphilis.—*Ibid.*

SULPHONAL POISONING.—Wien (*Berl. klin. Woch.*, September 26, 1898) relates a fatal case of subacute poisoning in a woman, aged thirty-two, suffering from paranoia. The patient received mostly three doses, each of 0.5 grain, at intervals of an hour and a half on each of thirty-one days, with occasional intermissions. The urine was examined daily, and the patient had been treated previously with about the same doses with no ill effect. When the sulphonah was discontinued the patient had become quiet, but this was not the result of any sulphonah narcosis. Her general condition was good. Thirty-six hours later the symptoms of sulphonah poisoning appeared. They consisted at first of gastric symptoms, with pain and vomiting, and later paralysis and hematoporphyrinuria were noted. It appears to the author probable that the poisoning was due to a cumulative action. Besides the ataxia there was paralysis in the arms and legs, probably due to a peripheral lesion. A notable fact in this case was the late appearance of the hematoporphyrinuria, which occurred eight days after the onset of the intoxication symptoms. Albuminuria and other evidence of a toxic nephritis appeared later. The pulse-rate fell toward the end to sixty-eight as a result of changes in the myocardium. At the necropsy a nephritis and cystitis were found. The heart muscle showed degenerative changes, and the pericardial sac contained an excess of fluid. The author maintains that the great danger in sulphonah poisoning lies in the irreparable changes found in the heart. In the stomach there were small hemorrhagic erosions, and the organ presented an hour-glass contraction due to old ulceration. Nine tenths of the cases of fatal sulphonah poisoning have occurred in women. Although the number of cases of poisoning by sulphonah is small considering the frequency with which it is used, yet precautions must be taken. The use of this agent must be as limited as possible, and intermissions of even four or five days are too short. The author thinks that when symptoms of poisoning have already

appeared, transfusion—or, failing that, infusion—of saline solution should be tried. Camphor should be used in case of the least threatening of cardiac failure. Efforts should be made to promote the excretion of the sulphonal by diuresis, etc.—*Ibid.*

LABOR COMPLICATED BY PARASITIC TWIN.—Shaver (Richmond Journal of Practice, January, 1898) publishes the report of a labor where the monstrosity recalls the case of "Posterior Dichotomy: a Three-legged Boy," described and figured in the British Medical Journal of June 11, 1898. A primipara, aged eighteen, appeared to be pregnant of twins, but two hearts could not be detected by auscultation. The presentation was occipito-anterior; the maternal parts were very dilatable. After the head was born, labor was delayed and a hand was detected presenting. This was replaced, and the shoulders were born, when another delay occurred, the thighs being flexed and the feet presenting along the trunk. The hips were finally born, and the child was found to be closely attached to another, which was finally delivered. The first child, the "autosite," was a girl; the parasite an acephalous monster attached by a broad base occupying the region from pubes to sacrum in the autosite, the nates being obliterated. The parasite was much the larger, and Shaver distinctly states that it possessed a penis and testes, possibly clitoris and inguinal ovaries, since the sex is, according to the experience of others, invariably identical in twins of this kind. The monster seems to have been thrown away, we must note, after a bold flap amputation; it had two feet and one hand, but no arm nor leg. The funis was common to parasite and autosite. The rectum of the living child was found about half an inch from the anus, where it gave off a branch gut to the parasite; this was cut and stitched and the wound closed. The child was neglected and died on the fourth day.—*Ibid.*

SERUM DIAGNOSIS IN TYPHOID INFECTION.—Tarchetts (*Gazz. degli Osped. e. delle Clin.*, November 6, 1898), in addition to observations on Vidal's reaction from the diagnostic point of view, has experimented in seven cases, with a view of determining what relation, if any, exists between the intensity of the agglutinating power and the gravity of the infection. According to Courmont, with slight fever and slight agglutinating power, the prognosis is uncertain, so also with high fever and high agglutinating power. High fever and low agglutinating power is a bad indication, low fever and high agglutinating power good. The author has worked the subject out thoroughly, and finds himself unable to corroborate Courmont's statements, and quotes cases in support of his opinion. When relapses occur he found that there was an increase in the agglutinating power. The degree of agglutination appears to be closely related to the resisting power of the organism and the modality of the infection. No safe prognostic conclusion can be drawn from comparison of the temperature chart in relation to the degree of agglutinating power.—*Ibid.*

Special Notices.

THE TREATMENT OF OBESITY.—To illustrate the rapid reduction of flesh produced by thyroid treatment, the following case, taken from an article by Dr. M. Weiss, of Vienna, published in the *Wiener Medicinische Wochenschrift*, No. 41, 1898, will prove of interest: "A hotel-keeper, forty-five years old, a gourmand and heavy drinker, presented the typical picture of the plethoric form of obesity: Symptoms of stagnation in the abdominal organs, bronchial catarrh; weight one hundred and three kilos. During thirty-six days he received ninety-six tablets of iodothyrene. In order, however, that in this case of obesity from overfeeding the action of iodothyrene should not be neutralized by immoderate eating and drinking, it was considered necessary to supplement the medicinal treatment with an appropriate regimen. The times of meals were therefore regulated, fatty and sweet foods were permitted only in small quantities, and the supply of alcoholics was reduced to one half or one liter of beer, and one quarter liter of wine *pro die*. All severe muscular exertion was avoided at the beginning of the treatment. The results of this treatment were excellent. The reduction of the bodily weight after the first week amounted to five kilos, after the second to eight and a half, after the third to ten and a half, and after the fourth to twelve kilos. The symptoms of stasis had in great part disappeared, the condition of bodily strength was satisfactory, and the patient was able to take walks of several hours' duration and to make a tour through the mountains."

VIN MARIANI IN EXHAUSTION.—We have had occasion in numerous instances to administer "Vin Mariani" to business and professional men who complained of being gradually run down. The work of the office, the cares and worry entailed by business, and the physical flaccidity brought on by overwork, all seemed to give way completely in a marvelously short space of time, despite the fact that the subjects continued uninterruptedly at their usual occupations. The notable fact to be observed is that in each instance the effect was permanent. But it must not be forgotten that, in order to make this result a lasting one, it is necessary to keep the patient upon a prolonged course in the use of "Vin Mariani." There is no doubt whatever that this preparation has proven itself a boon to mankind.—*The St. Louis Medical and Surgical Journal*.

WE call the attention of our readers to the advertisement of the Robinson-Pettet Company, Louisville, Ky., which will be found on another page of this issue. This house was established fifty years ago, and enjoys a widespread reputation as manufacturers of high character. We do not hesitate to endorse their preparations as being all they claim for them.

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE LIFE AND CHARACTER OF PROF. DAVID W. YANDELL, M. D., LL. D.

The Doctorate Address of the Medical Department of the
University of Louisville, 1899.

BY H. A. COTTELL, M. D.

Professor of Physiology, Histology, and Clinical Diseases of the Nervous System in the University.

"Or worn by slowly rolling years,
Or broke by sickness in a day,
The fading glory disappears,
The short-lived beauties die away."

Like a mighty reservoir with countless effluents, the Infinite source of Being expresses itself in human lives. Some lend themselves to homely uses; some turn the wheels of industry; some guard our life and property; some ornament our grounds in babbling brooklets or crystal sheets; some leap heavenward in fountains and diffuse themselves in pearly drops and rainbow-tinted mists; but each is useful in its day and way, subserving the Infinite purpose. Of all the manifold forms through which the Infinite finites itself, man is most "august and complicate." A common man is a marvel, a great man is a miracle. But the mystery of being clears not for all our scrutiny,

nor will the meaning of life or the mission of death be ever more than a riddle and a guess.

"I am ; how little more I know,
Whence came I? Whither do I go?
A centered self which feels and is ;
A cry between the silences :
A shadow birth of clouds at strife
With sunshine on the hills of life ;
A shaft from Nature's quiver cast
Into the future from the past ;
Between the cradle and the shroud,
A meteor's flight from cloud to cloud."

The dead man whom we commemorate to-day was a physician, a surgeon, a writer, a soldier, an orator, a teacher, a sage, and a philanthropist. His State, his city can boast no greater name, nor do the annals of American medicine present a more vigorous, original, and versatile figure. Listen, gentlemen of the graduating class, while I sketch the character and note the work of this many-sided man.

David Wendell Yandell was born on the 4th day of September, 1826, at Craggy Bluff, his father's country home, six miles from Murfreesboro, Tenn., a spot whereon was afterward fought one of the bloodiest battles of our civil war. The ancestors of the Yandells came from England and settled in South Carolina. Whether they were of Captain Christopher Newport's importation or not we do not know ; but that they were chivalry of the chivalrous is well attested by the fine intellect, manly beauty, personal courage, and gentlemanly bearing of all who have held this honored name. David W. Yandell came of a family that for two generations at least had been distinguished in medicine. His grandfather, Dr. Wilson Yandell, was the most noted physician of his locality, and practiced his profession in three or four adjoining counties. His father was the eminent Dr. Lunsford Pitts Yandell of blessed memory ; a pioneer of medical education in the West, a professor in Old Transylvania, a founder of our own dear University—the compeer of Caldwell, Drake, Gross, Cobb, the Flints, Rogers, Miller, Powell, Palmer, and Bayless. A scholar, a teacher, an orator, a writer of grace and power, a connoisseur in art, and a savant in science ; gentle, earnest, pious, modest, he was to the faculty what John the Evangelist was to the sacred college, and a Gamaliel to whose learning and wisdom "five thousand men who had formed his classes paid the deepest homage of respect." He died as he had

lived; and like Archimedes, Sydenham, Mozart, and Velpeau, "would not suffer himself to be interrupted in his work by any thing but resistless fate."

His mother was Susan Juliet Wendell, whose father, David Wendell, was a substantial merchant of Murfreesboro—"a man of high standing and great probity." "In her were combined all nature's choicest gifts. With uncommon beauty of form and features were united rare intellectual endowments; graceful and gracious, of refined manners and sprightly conversation, yet profoundly reverent and devout, she won the love of all who knew her."* As the sins of the fathers descend to the third and fourth generation, so also do the talents and the virtues. To David descended the ancestral gifts in measure full and overflowing. In him was the culmination of the genius of the Yandell family.

The only extant reminiscence of his childhood is from his own lips, viz., that he had the common pneumatic diathesis of the vigorous male infant, and made night hideous by his screams until he was eighteen months old.

It is unfortunate that no glimpses of the boy in early years can be had through the archives of his family. Did he pluck wild flowers and chase butterflies over the spot which was to become historic alike as the place of his birth and as one of the bloody marks of the war in which he was destined to take so prominent a part? Did he run to his mother's arms with hands and face begrimed with the dust that was to mingle with the dust of his comrades yet to be?

"Not for him the lesson drawn
From the mountain smit with dawn;
Star-rise, moonrise, flowers of May,
Sunset's purple bloom of day—
Took his life no hue from thence,
Poor amid such affluence?
Happy unto hill and tree
All too near akin was he."

As a rock may determine the course of a river, so some single, simple feature in the environment of the child may determine the trend and fix the destiny of the coming man.

When David was five years old his family moved to the heart of the bluegrass country—classic Lexington. Doubtless it was in this Valhalla of the hungry that Yandell laid the foundation for that connoisseurship in gastronomics and that fondness for horses, dogs,

*Prof. John A. Ouchterlony: Eulogy on the life and character of L. P. Yandell, jr., *Louisville Medical News*, Vol. XIX, No. 10, 1885.

the hunt and the chase which were to be the chief sources of his recreation during his long and laborious professional career.

At the age of eleven the family moves to Louisville, and the hero becomes our own. He is here placed under the care of the famous Noble Butler, who laid well the foundations of his education. Later he attends several sessions at Center College, Danville, where he seems not to have been a methodical student; for he leaves the school without the diploma, and enters upon the study of medicine under his father's direction in the University of Louisville. He graduated from this school in 1846. Like Goldsmith, Beethoven, Scott, and other great men, he is said not to have been a brilliant student. It was even hinted (by enemies of course) that he graduated in medicine only "by the grace of God and the good-will of the faculty," and with the further condition that he should go at once to Europe and make up for lost time.

Be this as it may, the young fledgling in medicine loved science and thirsted for knowledge; and these qualities, reinforced by keen powers of observation, a marvelously retentive memory, a philosophic faculty for digesting and assimilating what he saw, heard, and read, enabled him to acquire a finished culture and an erudition in things medical and non-medical of imposing breadth and depth. That he went to Europe bent on the acquisition of knowledge is proved by this quotation written in his school-boy hand on the title-page of his first diary: "Those who are in pursuit of science must rise early." Date: March 11, 1846. Indeed a good motto for a young man of twenty, sound in body and mind, and, like the youthful Alexander Hamilton, of a "*prevalent* ambition."

That Yandell was faithful to this motto is abundantly attested by his works. "By their fruits ye shall know them." His sojourn in Europe lasted about two years. During this time, which was spent chiefly in London, Dublin, and Paris, he studied medicine, learned the French language, and acquired much of that knowledge of men, manners, and customs which made him the wonder of all who knew him in subsequent years. This period is marked by two series of letters. One was on the people and their institutions. It was contributed to the Louisville Journal, which was edited by George D. Prentice. The other was on medicine, and was published in the Western Medical Journal, edited by Drs. Drake, L. P. Yandell, sr., and Colescott. In the first of this series Dr. Yandell showed that a saying he was wont

to quote in after years was not the maxim of a flippancy tongue, but a real working formula: "I am a man, and think nothing foreign to me which pertains to humanity." In one of these letters he says: "I know that in all I have written I have been candid and truthful, for the medium through which I have derived my knowledge of this people is most reliable—it is my own eyes."

The letters show not only a knowledge of men, their arts and institutions, remarkable in a young man of twenty, but a command of language and a finished style seldom seen in one so young. They were not only the delight of the readers of the *Journal*, but called forth hearty encomiums from the great editor himself, who was then a literary artist of world renown. I will read a part of one of these letters. It was written from Belfast, dated July 18, 1846:

"A week ago it was oppressively hot in London, the thermometer standing in the shade as high as 93°; to-day it is not above 55°—a difference that is quite appreciable. If so to me, how must it be to the thousands of poor creatures who, without hats, bonnets, shoes, or stockings, indeed, without every thing save an old piece of carpet or disgusting shawl or filthy piece of baize hardly sufficient to cover their nakedness and far from enough to protect them from cold, walk day after day up and down the narrow street overlooked by my window. This, the northern, is the most wealthy, industrious, and happy part of Ireland, and yet I have seen more squalid misery, more nakedness and utter destitution in the few days that I have spent here than ever I saw in *the almost twenty years* that I have lived in the United States. The knocker of the door of the house where I lodge is going almost incessantly, and nineteen out of twenty times it is lifted by the hand of want. You can not go out without being literally besieged by children, women, and men, who beseech you so earnestly and imploringly that it is impossible to refuse their modest requests: 'Only a penny, sir, and I will never ask you again; just one, sir! I have no bread; I'm hungry.' 'I'm hungry.' Who could withstand such an appeal? They may be impostors. If you think so, don't trust their words, but look into their faces. There is that there which none can mistake, none can doubt—starvation stares at you from out those eyes, and though mute, what volumes she speaks.

"This morning I saw twenty or thirty boys and girls picking up and eating some green peas that had been spilled at the filthiest market-place, and how the little destitutes did scramble! There was no play about it; it was deep, sad, earnest. Their empty stomachs were crying, and so they got food, the difference was not very great whether it was disguised by dirt and filth or not."

This epistle displays facility in descriptive and dramatic writing, but how much more! It is an early exhibition of that tenderness of

heart and sympathy with suffering and poverty which were to characterize Yandell's professional ministrations in after life. There is nothing more graceful and tender in Goldsmith or Lamb. It is a touch that "brings honey dew from buried days." The reminiscences of these ardent yet tender days must in after years have sweetened his cup of life, which had too much of bitterness. Such writing is genius in a boy of less than twenty summers.

The letters pertaining to his profession were written in 1847, during the second year of his pilgrimage. They are in the style of a master; full of fact, common sense, and philosophic comment. They are classic in medical literature. But the power and perspicacity of Yandell's style "grew with his growth and strengthened with his strength," until in later life his forceful diction in point of condensation, clearness, and brilliancy rivaled the classic periods of Sir Thomas Watson or the glowing sentences of Macaulay.

Let us look at some later writing. Twenty-five years have passed. He is forty-five years old, in the zenith of his fame and in the plentitude of intellectual power:

"While returning from California a year ago, in company with a number of friends now present, the train stopped in the heart of the Rocky Mountains at a water tank, about which had been built by laborers and miners a few frame shanties. A man in the garb of a miner entered the car and asked if some physician on the train would not step over to his house and see a sick child? I went with him. The patient was a little boy suffering with some head trouble following measles. He was being calmed during the day by the bromide of potassium, and soothed to sleep at night by the hydrate of chloral. In the pine-board hut hard by, occupied as home and office by the doctor of the settlement, lay a medical journal of the current month, from the pages of which he gathered the latest utterances of the masters and the newest therapeutic discoveries of the day. There in those mountain fastnesses, among that rude people, a thousand miles removed from the haunts of civilization, where in his lonely rides he saw more antelopes than fellow-men, and heard oftener the shrill yelp of the coyote than the voice of a friend, this hardy pioneer in our art rendered to the sick boy of the miner the same succor that was given by his more fortunate brother to the greatest and richest denizens of the cities, to the very princes of the earth themselves."

What a picture of wild mountain life is this. What a moral, too, it carries. What a sympathy with fellow-man. What a recognition of the beneficent uses of medicine, and its democratic and civilizing influences!

Twenty years later, in a charming historical address commemorating the fiftieth anniversary of the University, he writes thus of the noble men whose life and labor were given to the school:

"Not one of these men is living to-day. Some were gathered like shocks of corn fully ripe; some were taken when in their prime; others were called away 'while the dew of youth was still fresh upon them.' Each did in his appointed time, and in his way, the work allotted him."

Again, in the same address, we have the following profound and beautiful sentences:

"Universities of learning have larger uses than the mere scholastic instruction that they give. They are humanizing agents. Their influence, though silent, is none the less marked for good. They elevate thought. They disseminate knowledge. They develop the good, and repress and supplant the bad in those who resort to them. They set in motion the concentric circles of taste and culture, which widen with the sun. They adorn the cities which foster them. They bless those who look on them."

Doctor Yandell never attempted verse; but he had a correct ear, and his diction frequently rose to that rhythm of pure thought which is poetry. Such are these beautiful passages.

His European sojourn ended, Yandell returned to Louisville and began in earnest the practice of his profession. Young, brilliant, incisive, with winning address and fine professional equipment, he was soon well upon the way of success. He was appointed demonstrator of anatomy in his Alma Mater, and in this office acquired that intimate knowledge of the human body and that deftness of hand which in time made him *facile princeps* in surgery. In 1851, with success in view if not within his grasp, his health gave way and compelled him to relinquish for a time professional work. Buying a farm near Nashville, Tenn., he devoted two years to the pursuit of agriculture.

It was in this rural retreat that he acquired a love of field and brook, of fowls, birds, cattle, horses, dogs, insects, reptiles, fishes, grasses, grains, vegetables, flowers, herbs, and trees that made him the wonder and delight of all classes, from servant to senator, who came under the spell of his unstudied eloquence. His conversation was "the common unrhymed poetry of simple life and country ways." For none knew better than he how to find

"Tongues in trees, books in the running brooks,
Sermons in stones, and good in every thing."

It is said of Byron that he made every woman his confidant and every man his father confessor. Of Yandell it may with truth be said that he made every man, woman, child, beast, bird, and plant his teacher, for his observing eye missed nothing worth seeing as he made his city rounds or country tours. Take the following from a letter written in Texas to his editorial confrere, Prof. Parvin, in 1876:

"The Sunset road goes no farther now than Kingsbury, a dreary-looking terminus town, forty-seven miles east of San Antonio. Here I took the stage. I mounted the box by the driver. The driver was a quiet man, at least when on duty, as I believe most good drivers are. He was engaged in watching his team, and turning it here and there along our somewhat devious way. I soon learned from him that he was from Ohio—the northeast corner. His two wheel horses came from Missouri, his leaders from Kentucky; and a noble team altogether it was.

"On the road to San Antonio I had opportunity to study the country rather more at my leisure than I had been able to do on the cars. Texas is emphatically the land of ponies and doves. There are more of both than I have ever seen anywhere else. The former are small, ragged, of variegated color, and vicious, though they are oftentimes pleasant goers, and occasionally handsome. They are inexpensive brutes, selling, according to size and quality, from four to ten, and even twenty-five dollars. The doves abound; they build their nests in the prairies (where trees are scarce) on the ground, and between the rails of the fences. I saw four nests in one fence-corner, and more than twenty in one small post-oak. Numerous partridges, still in flocks, whirled across the road, especially in the mesquite country. I noticed among some on the ground that the cocks were fighting each other, and making love to the hens, preliminary to selecting their partners for the family business, which must now soon begin. This favorite little bird is said to be found by the hundreds of thousands in the country between San Antonio and the Rio Grande—a flock, a friend told me, under every mesquite bush, and the bushes close together. I should like to be among them next November. I saw a few chaparral cocks—splendid looking fellows, the color of a prairie chicken, somewhat larger, and with a long tail. He is almost as fleet of foot as an ostrich, flies reluctantly and but for short distances. His safety against his enemies lies in the density of the cover he keeps, and his speed when found in open ground. His wings don't appear to be of any special use to him, farther than to enable him to mount the brush, which he leaves behind him with astonishing celerity. The mocking-bird is abundant, as is also a bird called here the bird of paradise, a beautiful little fellow with an extravagantly long tail, which really seems to impede his flight. Add about six inches of tail-feathers to a small mocking-bird, and give him a dull white breast, and you have this chap.

"I saw, for the first time, a Mexican buzzard—in size between a crow and our buzzard, say the size of a large hawk, dull white breast and tips, large red wattles; a very destructive bird on young pigs, chickens, rabbits, and other small deer. His movements and behavior at a distance reminded me of those of the fish-hawk. The mule-eared rabbit, and our own cotton-tail, also abound. The former is four or five times the size of the latter; and when moving at half speed, he looks for all the world like a young antelope. None but the fleetest greyhound can outfoot him, and he has a great bottom as well. I saw but one variety of the woodpecker; the hairy woodpecker, our red-head woodpecker, the woodcock, and yellow hammer being either scarce or altogether unknown."

Not White, of Selborne, had a keener eye for nature's exposition, nor greater love for living things, nor more felicity in telling their story.

The theme grows upon the delighted and delightful narrator, and he rises to poetry as a graceful bird takes wing. Listen, and you will hear music in this strain :

"By most of the standing pools of water the crane kept watch like some gaunt sentry, and, when disturbed, rose and slowly flapped himself away across the illimitable prairies. Blackbirds by the thousands at times darkened the air and crowded the heels of the plowman as he turned up the worms and larvæ, on which they fed. An occasional jacksnipe, detained beyond his time, 'scaiped' as he was disturbed in his repast; while the upland plover was to be seen in all the newly plowed land and throughout the prairies."

"Dr. Yandell," says Mr. Watterson, "was an undoubting and unflagging hunter of all game, from the homely quail to the grizzly bear himself."

His dining-room, which is to-day just as it was when the master left it for the chamber of long suffering and death, looks like an exhibit of huntsman's plunder at a fair. Great antlers of the gigantic Western elk and Canada moose, the lesser antlers of the reindeer and our own beautiful fallow deer; horns of the Rocky Mountain goat, the antelope, and the ibex, with heads of the buffalo and other wild animals hang over and about lintel, casement, and mantel. Pictures and preparations of all sorts of game birds decorate the walls, while vivid Landseer and Anstie engravings picture the hunter in all his glory. The dogs, the gun, and necessary accessories were the common companions and accompaniments of his country rambles. No one could judge better than he the signs, rational and physical, that beto-

kened the hunting-ground, none could track the game more surely to its covert, or knew better how to reconnoiter it, flush it, and bring it down. He had hunted from Maine to Georgia, from the Yellowstone to the Rio Grande, from Beargrass to the Sacramento. Neither burly swain nor seasoned athlete could walk him down. Among the fellows of his field sports were found celebrities, home and foreign, of every calling and rank, from common life to royalty. Of his beloved and lamented friend, Cowling, he said, in his memorial address of 1882: "His contemplative mind naturally made him a disciple of the gentle Isaac, rather than a follower of hounds or of pointers. Every thing, however, relating to the field interested him, and often, when a friend had returned from a day's shooting, he would go to hear tell of the doings of the dogs." And then, with the elocution of one only who knows what he reads, and feels it, too, he recited Cowling's own nervous words:

"A glorious nibble may stir the nerve currents to the brachial plexus for months to come, and a winged partridge excite hopes that may never die."

In a letter written from Texas he thus talks of the upland plover:

"No one who has not eaten this delicious bird at this season in Texas can have any idea what a delicacy it is. He is hunted in buggies or open wagons, it being impossible to get sufficiently near him either on foot or on horseback. I wish he made his home in Kentucky. I don't know that his doing so would lengthen my days on the earth, but it would shorten many of his and add greatly to the enjoyment of mine. I don't think I ever ate a better bird."

Retrieving health in his country retreat, Yandell came back to Louisville and entered upon professional work with renewed vigor and phenomenal success. His practice grew to imposing proportions, and he soon made for himself a great name as a teacher of medicine. It was at this time that he established the "Stokes Dispensary," and thus became the founder of clinical teaching in the West. He first taught classes in clinical medicine privately in this little institution, but was soon thereafter made Professor of Clinical Medicine in the University. His work here was destined to be brief. The civil war was upon the country, and the young doctor became a soldier, casting his lot with the Southern cause. He enlisted in Bowling Green, under General Buckner, but was soon transferred to General

Hardie's command, from which he was taken by Gen. Albert Sidney Johnston, who made him medical director of the department of the West.

Here we come upon a bit of history which recalls the noble act of Sir Philip Sidney, and shows that the spirit of chivalry and the day of heroic deeds tempered with mercy was not confined to the era of good Queen Bess and days anterior thereto. "At the battle of Shiloh, shortly before the fatal shaft struck down his friend, Dr. Yandell was riding by his side in anxious solicitude while the battle raged about them, and when nearly all the staff were off on duty. The commander saw a wounded Federal soldier lying near, and, turning to Yandell, told him to dismount and see if he could do any thing for the relief of the poor fellow. The doctor obeyed, while the General passed on to the front. In a few moments his femoral artery was severed by a minie-ball, and he died before those around him were aware that he was wounded." This act of humanity caused the death of this great and noble man. If his surgeon had continued with him his life would have been saved.

Dr. Yandell continued to fill the high office of medical director till the close of the war, serving successively on the staffs of Gens. Beauregard, Hardie, Joseph E. Johnston, and E. Kirby Smith. He was in the battles of Shiloh, Murfreesboro, and Chickamauga. He was always a soldier of soldiers, calm and brave in the face of danger, and unflinching in duty. His department was admitted to be the best ordered in the service.

At the close of the war Dr. Yandell returned to Louisville, where he was welcomed alike by Unionist and Confederate. He now illustrated the catholicity of medicine in the rôle of a peacemaker.

A meeting of the American Medical Association was appointed to take place in Cincinnati in 1865. Between the victorious Unionists and the conquered Confederates the feeling was intense and bitter. The gap in friendship, already wide, was widening. Dr. Yandell took the initiative in "shaking hands over the bloody chasm" with his Northern medical brethren. In a noble peace-making speech, wherein he nominated his great master, Dr. Gross, for the presidency, he carried the day for harmony. Hatred was deposed and brotherly love enthroned.

Thus the doctors were first to substitute the white banner of peace for the blood-stained ensign of war, and set an example to the

theologians and politicians which, had it been promptly followed, would have saved our Southern brethren the humiliation, the inquisition, and the torture of reconstruction.

At this meeting Dr. Vandell was elected one of the four vice-presidents of the association.

In 1866 Dr. Vandell drank the cup of sorrow to the lees; he lost his only son. This "hyacinthine boy" was twelve years of age, bright, beautiful, manly, talented, and full of promise. The father idolized the youth, whom he fondly hoped "fate had reserved for a glorious manhood." While on a visit to his relatives in Tennessee the boy was drowned in the Cumberland River. Those who knew him best say that the father never recovered from this shock of fate. He was always thereafter particularly tender in his regard for boys. His love for them was as sweet incense before the altar of a fond fathers' devotion, and the sacrifice was a broken heart. Dr. Vandell could never thereafter see a sick or wounded boy and an anxious father at his bedside except through tears.

In 1867 he was elected to the chair of the Science and Practice of Medicine in the University. In 1869 he was made Professor of Clinical Surgery, a chair which he held till the close of his earthly work.

It will be admitted by the thousands of physicians who were privileged to sit at the feet of the master in the University, that great as he was in other functions, here he was pre-eminent. As a teacher of clinical surgery he probably had no equal in the world. Tall, Apollo-like in form, graceful, handsome, not self-conscious, with flowing chestnut locks, deep, brown, penetrating eyes, a face limned and lined by thought, and so muscled as to express all the gamut of emotion from smiles and tears to tempestuous passion, with a rich, sonorous baritone voice which modulated to every mood, and with gesture, pose, and action suited to the word, he was an orator of overwhelming power.

I first saw him and heard him speak in the fall of 1870. He was then 44 years of age. The place was the old amphitheater, in what is now the sky parlor of our city hospital. How eagerly we of the freshman class watched for the signs that betokened the entrance of the famous man! Anon there was a creaking of doors, a scurrying of feet, and a shrieking of unlubricated castors as the invalid car was trolled in by the clinical assistants. On this wretched carriage lay a still more wretched man—wrecked by a disease acquired through sin; a picture of emaciation, weakness, suffering, and despair.

A few paces behind walked the great surgeon, flushed with fame and in the heyday of health and splendid manhood. We were all ears as the master, in a few direct, simple words, proceeded to outline the features of the case.

An awkward incident in the examination of the patient provoked a laugh from some of the thoughtless students. Instantly the professor raised himself to his full height, and, with a look and a gesture, remanded the disturbers to silence. Several anxious seconds passed before he spoke. Said he:

"If I were old and poor and sick and wretched, and had come to this clinic for relief, and had heard that hollow, heartless laugh, I would think less kindly of doctors than I had thought before.

"Nobody comes to the public hospital but the poor, the friendless, and the wretched. This unhappy man, the victim of his own sin, has come here to die. What is it to be prostrated by such a disease? It is suffering upon suffering, and death. I would not have that loathsome disease for all the influence and power of the kings and potentates of the old world; for all the shining wealth that ever passed through the golden gate of the peaceful ocean!"

We need not add that order was restored and maintained till the end of the lecture.

As a surgeon Dr. Yandell was pre-eminent. In operating he cut to the line and to the required depth with geometrical precision. His dissections were artistic, and he found his way through the labyrinthine surgical spaces with a certainty and safety to the patient which savored of magic. His dressings were beautiful. They showed a nicety of adjustment which betokened the mechanical gift in high degree; while his treatment of wounds, surgical and accidental, was characterized by a scrupulous cleanliness, which in early post-bellum days was nothing less than a prophecy of the since splendid triumphs of aseptic surgery. But, great as Yandell was as a surgeon, he was no less so as a physician. Throughout the greater part of his career specialism was unknown. The successful doctor had to be an all-round man. Yandell had drunk deep at those fountains of medicine whose presiding deities were Paget, Sir Andrew Clark, Louis Laennec, and their kind. He had learned well the science of diagnosis, the natural history of disease, and the art of therapy. He traced disease to its lurking place with the trained eye, educated touch, and logical acumen of the master, and established treatment with rare judgment and sound common sense.

His gentleness, tenderness, and sympathy in dealing with the sick are proverbial all over the wide field of his great practice.

To the afflicted he was a ministering angel, making light to shine in dark places. To the poor he was especially kind and attentive. He gave to them the best that science had in store for them, and opened his purse liberally to their needs when he found them in extremity.

“Such lived not in the past alone,
But thread to-day the unheeding street,
And stairs to sin and famine known
Sing with the welcome of their feet;
The den they enter grows a shrine,
The grimy sash an oriel burns,
Their cup of water warms like wine,
Their speech is filled from heavenly urns.”

How often have I heard him say :

“No great and lasting practice was ever built up whose foundations have not been laid among the poor.”

Dr. Yandell was a wit, and could have entered this field of literature in successful rivalry with Douglas Jerrold, Artemus Ward, Josh Billings, Mark Twain, and their like. Here are some specimens. Writing from San Antonio, where Mexicans and Mexican usages predominate, he says :

“After seeing some friends, I spent the remainder of the time in the Mexican eating-house; and, Parvin, let that supper do for us both. As Colonel Charley West, an old army friend, said to his son, a lad of ten years, in a letter written to him just as we had surrendered the last musket to you fellows :

“‘My son, if in the future time, when you have grown to be a man, anybody should ask you to join in a revolution, of course you will very probably do as you please; but I beg you to remember that it is the opinion of your father that he has revolved enough for the entire family.’ I feel just that way about a Mexican supper; at least of one composed of ‘enchilada’ and ‘tamallis,’ I have eaten enough—and yet it was but a taste—for the present editors and all future editors of the *American Practitioner*; and I wish here to be put on record to that effect.

“You never ate enchilada, did you, Parvin? Well, don’t. An enchilada looks not unlike an ordinary flannel-cake, rolled on itself and covered with molasses. The ingredients which go to make it up are pepper, lye-hominy, pepper, onions chopped fine, pepper, grated cheese, and pepper. The hominy is first beaten into a paste or dough, and this is flattened to the

thickness of an ordinary batter-cake, and then turned several times upon itself, the pepper, onions, pepper, cheese, and pepper being placed between the folds, and over all is poured a sauce or gravy of pepper. In point of looks the enchilada is, as I have intimated, not uninviting. In point of taste it is a cross between bicarbonate of soda and capsicum, with a good deal of 'chaw' in it. One mouthful would go round an entire family in Louisville. The tamallis when placed on the table presented the appearance of a lot of huge shuck cigarites which had been soaked in water. They were composed of the same lye-hominy paste, shaped into cylinders a little larger than and about as long as your finger, containing some kind of forced meat. Each cylinder is wrapped and then boiled in a corn shuck, and served in this envelope. A friend who was with me, and who declared he was not particularly fond of the dish, though he often ate it, soon had a pile of wet shucks by his plate six inches high. I think he ate a dozen of the things. I was satisfied with a small part of one. The tamallis tasted to me very much as I suppose boiled macaroni thickened with bread soda would do. My opinion is that no man can eat enchilada and tamallis long and remain honest. The three staples of Mexican cookery, as I observed it, are pepper, corn, and pepper; the corn is sandwiched between the pepper. The corn is first husked by being soaked in lye or lime-water, and then briskly rubbed and beaten on a flat stone—a process which produces a paste or dough, or meal, meaner than any lye-hominy you have in Indianapolis.

The vein of his rare wit and humor is again brought to light in an editorial letter wherein he describes some incidents pertaining to the dinner which was given in Philadelphia in 1879, in celebration of the fifty-first anniversary of the entrance into the medical profession of Dr. Samuel D. Gross. He writes:

"Some of our brethren in Philadelphia determined to celebrate, by a dinner, the fifty-first anniversary of Prof. Gross' entrance into the profession. The number of subscribers was limited to one hundred. Invitations were issued to a few of the friends of Dr. Gross living outside Philadelphia. I was of the number. I left home Tuesday afternoon, and, after an entirely uneventful ride, reached Philadelphia on Thursday morning. Seven o'clock that evening was appointed for the banquet. Rain set in early in the forenoon, and by evening had reached such proportions that it might fairly be termed, in the language of a Texan, a 'root soaker.' I thought the water fell in a more than ordinary quiet way, more soberly, as it were, than usual; and when turning the corners, as it filled the gutters, it seemed to go more at right angles than I had been accustomed to observe elsewhere. Whether all this be just as I put it, no one can gainsay that the 'City of Brotherly Love' is a very wet place on a rainy day.

"Professor Agnew took the chair at eight o'clock. A moment before he took away my appetite by telling me that I was expected to reply to a

toast. A timely notice that one is to get on his legs is allowable. No notice at all until you are called on is even better; but to knock the epigastrium entirely out of a man just as he takes his seat to fill the aching void left by a two days' journey is a coarse cruelty which should be inflicted on no man. It turns bread to stone and converts the meat into a serpent. Don't you remember the group of unhappy-looking people you've seen at banquets; the men who ate nothing and drank less, and with whom you couldn't, no matter what effort you made, keep up a talk, who wouldn't listen to you, and who gave you no opportunity of listening to them; the gloomy-looking chaps who seemed to wish they were at home in their little beds? Well, they are the men expected to speak, and who have been told so just as they took their seats.

Dr. Yandell was a connoisseur in the things which make to the comfort of the inner man.

He was most admirably fitted at any medical society for the chairmanship of the "committee on nutrition and stimulation."

He was a royal host, and loved nothing better than to wine and dine his friends. None knew so well as he what to give them to eat and drink, though he was himself, nevertheless, a very small eater and a moderate drinker. A Chesterfield in manners, he made everybody feel at home, and added to the good cheer his unrivaled gift for serious discourse and delightful anecdote. Whenever a dignitary was to be entertained by the city, Yandell always headed the committee of entertainment. His fame as a conversationalist was co-extensive with the English-speaking people.

Says Mr. Watterson:

"During fifty years Dr. Yandell was the intimate of most of the famous men of his own country, and of many of the famous men of the world. He was often abroad, and always a welcome guest in the European capitals, where his distinguished bearing, no less than his extraordinary charm, even more than his fame as a surgeon, made him a welcome guest in all companies."

The banquet ended, he could make an after-dinner speech which might invoke admiration and provoke envy in a conclave of gods and demi-gods. Here is what he said at the Gross dinner in response to a toast to Kentucky and Kentuckians:

"I feel, Mr. Chairman, that it is an honor to be called on to speak on such an occasion and for such a people—a people who have given to statesmanship a Clay, a Lincoln, and a Breckinridge; to arms a Johnston, a Preston, and a Buckner; to surgery a McDowell and a Dudley. A goodly company! Stately names! Would you think me as exceeding the limits

of good taste if I added, and chief among all these is that of him who bears the mark of our guild, Ephraim McDowell? For, sir, will not the labors of the statesman give way to the pitiless logic of events, the voice of the orator grow fainter in the coming ages, and the deeds of the soldier eventually find place but in the library of the student of military campaigns, while the achievement of the village surgeon, like the widening waves of the inviolate sea, shall reach the uttermost shores of time, hailed of all civilizations as having lessened the suffering and lengthened the span of human life!

"Again, would you think me very far wrong were I to couple the victorious issue of the late war and the operation of ovariectomy as in different fields the two most stupendous events of modern times? Sir! both are to be credited to Kentuckians.

"Mr. Lincoln effected the one, and Dr. McDowell accomplished the other. Nor yet, in my opinion, do the two achievements admit of comparison. Powerful cabinets, far-seeing ministers, renowned captains, a daring and multitudinous soldiery, a rich, a steady, a united and a persistent people contributed to the success of the former. Its glory was won amid the blare of trumpets, the groans of men, the shock of contending armies. The glory of the other belongs to but one man, is single and indivisible, was won amid the smiles of fair women, and by the cunning of a single hand, which, unaided and alone, plucked victory from an enemy which, before McDowell's time, had defied all that was subtlest in art and repulsed every assault of science."

What a happy comparison, what logic in development, what eloquence in statement, what political insight, what a moral, what a sympathy with suffering woman, what a commendable pride in his beloved profession and its beneficent uses!

In 1870 Dr. Vandell, in conjunction with Dr. Theophilus Parvin, established *The American Practitioner*, which at once took a commanding position in medical literature, and continued to influence medical opinion for sixteen years (1886), when it was combined with the *Medical News*. As an editor Dr. Vandell was conscientious and painstaking. His excerpts contained always the very pith of the papers from which they were taken. He never opened his columns to controversy, and never published long-winded, abstruse, and theoretical papers. He was a pungent and witty paragraphist, and his serious editorials were graceful, timely, and instructive. One of his own scientific papers, published in the second volume of the *Practitioner*, has become classic in medical literature. It is an analysis of 415 cases of tetanus. The work was done with the assistance of the late Prof. R. O. Cowling, then a young graduate in medicine. The conclusions to which this analysis led have been quoted in every work in general surgery that has appeared since the year 1870.

In 1871 Dr. Yandell was elected president of the American Medical Association, the highest honor that can be conferred upon an American physician. He presided at the subsequent meeting with so much grace, dignity, and ability that the celebrated Dr. Bowditch, of Boston, publicly expressed the wish that he might be made president of the Association for life.

In 1870, after the death of his father, Dr. Yandell again visited Europe, where he wrote another series of sprightly and instructive letters, which were published in his own journal of that year. In 1886 he was made a Fellow of the Philadelphia College of Medicine. In 1887 he was appointed Surgeon General of the troops of Kentucky. In 1889 he was elected President of the American Surgical Association. His address as retiring president of that body, at its meeting in Washington, D. C., 1890, was on Pioneer Surgery in Kentucky. It is exquisitely written, and recites the great deeds of Brashear, McDowell, McCreary, and Dudley.

It was now the beginning of the last decade of the century ; Yandell was an old man. Though erect in body, and sage and eloquent in conversation, he felt, and those who loved him could see, that the fiery splendor of his wonderful soul must ere long "fall into abatement and low price."

He seldom went out after night, was less attentive to practice, had less confidence in himself in operating, and wrote but little. He continued, however, to find solace in his books, bower, or fireside, and leaned more and more upon the bosom of his model household, where loving hearts and willing hands were ever ready to do his every behest, to lighten the burthen of accumulating years, and make smooth and beautiful the sunset declivity of his devoted life.

His last appearance upon the rostrum was the occasion of the delivery of the Doctorate Address of the University medical class of 1892. This address was his swan song, his last contribution to medical literature. In it the philosopher, the sage, the scholar, the teacher, and the philanthropist work in harmony and full power. Listen to these words of beauty and deep meaning:

"Temperament is the thermometer by which the tone of the brain is to be ascertained. By the eye, the curling locks, the complexion, the pulse, all the movements of the individual, we are to determine whether the brain is like soft metal or the Damascus blade, the dull, spongy charcoal or the glittering gem. Developed in one region and having the true temper, and

moral influences favoring, a Howard is formed to make 'the circumnavigation of charity.' Developed in another region, and allowing a bad education or the spirit of a barbarous age to confirm and strengthen the bad tendency, an Attila comes forth to desolate and to curse. The twig is bent by nature, certain tendencies are innate; education, in its broad sense, may control, improve, subdue, almost eradicate. The predisposition is given, is sometimes inherited, sometimes comes as the wind blows, we see not whence. It was before the propitious gale of benevolence that Howard pursued the voyage of his illustrious life. Ambition is the headlong current by which warriors and statesmen, the mighty men of the earth, have been swept along the tumultuous sea of human affairs.

"This principle finds further and stronger illustration in the lives and characters of Julius Cæsar and Mark Antony. One can not be said to have been worse or better than the other. Both were highly though not equally gifted, but they differed widely in their passions, powerful in both, though not the same in both. Cæsar, like Antony, was touched by the charms of Egypt's dazzling Queen, and bowed for a moment to their supremacy—but it was only for a moment. It was but an episode in his eventful life, from which he quickly returned to its grand story. The heady current adown which he sailed was not to be stayed or turned aside from its course. The spur by which his daring spirit was goaded almost to madness Mark Antony's peaceful bosom scarcely knew. With Cæsar ambition was a whirlwind drawing all other passions into its desolating path. With Mark Antony it was a fitful breeze, now gusty and loud, now softer than the whisper of love. The orator who had inflamed the Roman people by his eloquence yielded himself an easy captive to a more bewitching eloquence, and for another Helen bade 'Rome in Tiber melt, and the wide arch of the ranged empire fall!'"

This luminous passage surpasses in grace of diction, solidity of thought, and philosophic insight, perhaps, any thing ever before written by this brilliant man. Huxley or Emerson might well have been proud of it. At this time old age was well upon him; his intellectual flashes were fitful, and his bodily strength was giving way under the weight of his eventful years. His feet had reached the margin of the bank whose gentle slope was to conduct them to the dark river.

"But on the river's farther side
He saw the hill-tops glorified;
A tender glow, exceeding fair,
A dream of day without its glare.
From out that darkness where he trod,
He gazed upon those hills of God.
He paused as if from that bright shore
Beckoned his dear ones gone before,
And stilled his beating heart to hear
The voices lost to mortal ear."

He speaks; hear him:

"If the Ego, the I, is, it must always have been; and if it is, and always has been, it must always be. 'Naught from nothing comes' is a maxim which will stand while logic lasts and worlds circle their orbits. And to say that the soul of man, be his body evolved as it may from the distant protozoön or protophyte which was the beginning of life on this globe, to say that the sublime phenomena of this soul are but a series of vibrations in the specialized and highly differentiated protoplasm of the cells of the brain, is as monstrous as it would be to say that the suns and the planets dropped full-orbed out of the inane. No, gentlemen, we are, we have been, and we shall be.

"Our birth is but a sleep, and a forgetting;
The soul that rises with us, our life's star,
Hath had elsewhere its setting, and cometh from afar;
Not in entire forgetfulness,
And not in utter nakedness,
But trailing clouds of glory do we come
From God who is our home.'

"We are here without our will, but not without responsibility. Life, with certainty of trial and trouble, but with possibility of success and happiness, is before you. Quit you like men! Be strong! Give careful heed to the ineffable teachings and example of the Great Physician, and so live and practice and ornament the high office which is your calling, that, as your souls expand by study, thought, and experience, they may come to be the better fitted for endless unfolding in the infinite beyond. There, through the aeons of eternity, with fit environment, the deathless spirit of man shall approximate more and more to that perfection which is God: 'For we know that if our earthly house of this tabernacle were dissolved, we have a building of God, an house not made with hands, eternal in the heavens.'"

"No perfect whole can our nature make,
Here or there the circle will break."

Our hero had faults. He never tried to hide them, however, or if he did, the disguise was too thin to shut out the penetrating gaze of envious mediocrity. Yandell's sins of omission, commission, weaknesses, and eccentricities have been sufficiently advertised by his enemies.

"He who ascends to mountain-tops will find
The loftiest peaks o'ercast with clouds and snow;
He who surpasses or subdues mankind
Must look down on the hate of those below."

He was a severe critic at times, a good fighter, and a fair hater. Like a stag at bay, he sometime turned upon his pursuers and gave

them a merciless goring; but the battle over, none was readier to accept the terms of peace, to make up, and forgive.

"No further seek his merits to disclose,
Or draw his frailties from their dread abode,
(There they alike in trembling hope repose,)
The bosom of his Father and his God."

But if Yandell was a good hater, at times cruelly severe in his criticisms, and a robust fighter, giving and taking hard blows, his heart was warm as a woman's, and his loves were like showers in summer or sunshine in autumn. He loved with a great heart and with a constancy that knew no change. His reverent regard for his 'Great master, Dr. Gross,' attests this truth. This love began when Gross was a professor in the University, young, inexperienced, and unknown to fame, and when Yandell was his student and assistant. The love was returned by the master in good measure, but the pupil loved him with unswerving fidelity and increasing intensity for the better part of a lifetime.

And when the master died, Dr. Yandell crystallized his memory in an epitaph which will live among epitaphs so long as our language shall last:

IN MEMORIAM.

WITHIN THIS URN LIE THE ASHES OF
SAMUEL DAVID GROSS,
A MASTER IN SURGERY.

His life, which neared the extreme Limits of the Psalmist,
was one unbroken process of Laborious Years.

He filled Chairs in Four Medical Colleges in as many States of the Union,
and added Luster to them all.

He recast Surgical Science as taught in North America,
Formulated anew its Principles,
Enlarged its Domain,

Added to its Art, and imparted fresh Impetus to its Study.

He Composed many Books, and among them

A SYSTEM OF SURGERY,

Which is read in different tongues, wherever the Healing Art is practiced.

With a Great Intellect, carefully trained and balanced,
He aimed with undivided Zeal

At the Noble End of Lessening Human Suffering
and Lengthening Human Life,

And so rose to the Highest Position yet attained in Science
by any of His Countrymen.

Resolute in Truth, he had no Fear, yet he was
both Tolerant and Charitable.

Living in Enlightened Fellowship with all Laborers in the
World of Science,

He was greatly Honored by the Learned in Foreign Lands
and deeply loved at Home.

BEHIND THE VEIL OF THIS LIFE THERE IS A MYSTERY WHICH HE PENETRATED
ON THE

SIXTH DAY OF MAY, 1884.

HIS MEMORY

Shall Exhort and his Example shall Encourage and Persuade
those who come after him to Emulate Deeds

which, great in themselves,

Were all Crowned by the Milkwhite Flower of a

STAINLESS LIFE.

The epitaph is engraved upon the tomb of Gross, where it will stand as long as fame shall weave garlands for that immortal brow.

Master and pupil "were lovely and pleasant in their lives." Let us hope that in their death they are not divided; for of them it may be said with far more reaching truth than of Saul and Jonathan, "They were swifter than eagles; they were stronger than lions."

We pause for a moment to ponder the lesson of this eventful life, which, like a star of the first magnitude, so long shed lustre on the world of medicine. *Terar dum prosim* wrote the great Carlyle over the picture of the burning candle, which symbolized his life. "May I be wasted that I may be of use." Let every young man who enters medicine resolve to be more than a candle or rush-light. Let him be a star. It is of little moment whether you shine with the diamond-like light of Sirius or the soft firefly-like luster of a pleiad, so that you shine for all that is in you, and thus help to make the medical constellation a poem in the heavens, to be read forever in letters of living light. As naught from nothing comes—so no thing returns to naught. And though a star may waste away in shining, not the faintest vibration of its tiniest beam can in the nature of things be lost.

"Alike are life and death,
When life in death survives,
And the uninterrupted breath
Inspires a thousand lives.
Were a star quenched on high,
For ages would its light
Still traveling downward from the sky
Shine on our mortal sight.
So when a great man dies
For years beyond our ken,
The light he leaves behind him lies
Upon the paths of men."

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE—SECTION IN ORTHOPEDIC SURGERY.

Meeting of February 17, 1899.

Hypertrophy of the Tibia. Dr. S. Ketch presented a girl, four years of age, whose right tibia was greatly lengthened and thickened, with decided anterior bowing. He had first seen the patient in December, 1898. The epiphyses were thickened, but the enlargement was not confined to them. It was most marked at the middle of the shaft, but included the whole bone, as was seen by the X-rays. Length: Right leg, $19\frac{1}{2}$; left leg, $18\frac{5}{8}$; right tibia, $9\frac{1}{4}$; left tibia, $8\frac{3}{4}$. Circumference: Right thigh, $9\frac{1}{2}$; left thigh, $10\frac{1}{4}$; right calf, $8\frac{5}{8}$; left calf, $7\frac{7}{8}$. The disease had begun eighteen months ago with a small lump on the leg and pain at night and when she walked. This was Dr. Ketch's second patient of the kind. The first one was a girl, eleven years of age, who had been presented to the Section in November, 1897; had been operated on for the purpose of shortening and straightening the bone, and had again been before the Section in March, 1898, with resulting improvement and ability to walk about. (See American Practitioner and News, January 1, 1898.)

The bone had been found to be solid, the cavity being obliterated. Neither of the patients had received any benefit from anti-syphilitic treatment. There was doubt as to the cause of this growth of the bone. It was not improbable that the trouble began in the periosteum. It was a question whether something ought not to be done early in the way of an operation to arrest the process, such as an incision through the periosteum, which might at least relieve the tension.

Dr. T. H. Myers said that this affection was extremely rare. He did not think that any drug could produce a material improvement, though it might prevent further progress of the disease. Such cases were sometimes assumed to be syphilitic for lack of better information, though no history or symptoms of that infection could be elicited.

Dr. V. P. Gibney suggested a linear incision through the periosteum, and if that could be done with perfect safety, going further by denuding the bone from the anterior surface and shaving off the redundant por-

tion, suturing the periosteum and letting it heal primarily. The growth in length could not be stopped except by attacking the epiphysis, which would be hazardous.

Dr. H. Gibney said that in addition to the treatment which had been suggested, he would go further and complete the operation, straightening the leg by the removal of a wedge-shaped piece of the bone and maintaining the correct position by plaster-of-paris dressings.

Dr. Myers thought that incision would only relieve the pain. He would not operate until the child had attained its growth or the disease had stopped.

Dr. G. R. Elliott said that it was of pathological interest that the tibia alone was affected, while the fibula remained normal. There was but little deformity compared with the decided bowing which had been an indication for operation in Dr. Ketch's former patient, in whom the pathological findings were diffusely distributed throughout the entire thickness of the bone. He asked what effect tying the nutrient artery of the bone would have on the progressive atrophy.

Dr. Ketch said it would probably stop the growth of the bone.

Dr. Elliott suggested the possibility of resulting necrosis.

Dr. A. B. Judson said that if the whole limb were affected, symmetry might possibly be promoted during the growing period by checking the vascular supply of the larger limb, by bandaging or lacing the whole limb, and increasing the vascular supply of the smaller limb by venous compression. At the same time the functional activity of the one could be lessened and that of the other increased by the use of an ischiatic crutch or other apparatus having the same effect, with a high sole under the shorter limb. But as the diagnosis was absent and the pathology unsettled he could not suggest a reasonable treatment.

Dr. Ketch said that at an earlier stage some of the operative procedures suggested might have arrested or prevented the abnormal growth of the bone, but, on the other hand, they might have promoted it. He was opposed to the removal of a portion of the bone during the growing period. As the parents of the child desired active treatment, an incision might be recommended as likely to stop the pain, which he thought was due to tension.

Enlargement of Epiphyses. Dr. Myers presented a girl, sixteen months of age, whom he had seen for the first time on January 10, 1899. The epiphyses of the radii, femora, tibiæ, and the entire

phalanges of several fingers were enlarged. The joints of the ankles, knees, fingers, wrists, and the right elbow were swollen and somewhat restricted in their motions. The enlargement at the ankle-joint was peculiar, several of the tarsal bones sharing in it. She walked with difficulty, with knees and hips flexed. Flexion of the knees and unwillingness to walk had been observed immediately after an attack of cholera morbus in October, 1898. The knees were kept a little flexed, and there was a very slight effusion in these joints. The child did not sleep well, but otherwise seemed to be in good health. Potassium iodide, gr. iv-viii, had been given t. i. d. for a month without improvement. The teeth were not notched. There was no syphilitic history. It was not typical scurvy. The child had been for three months on a general diet, including eggs, meat, potatoes, and fruit. It was certainly not a typical case of rickets. She had cut teeth early and walked at ten months; the head was well formed and the abdomen not prominent. The diagnosis remained uncertain.

Dr. Ketch said that the obvious feature of the case was a very exaggerated change in nutrition—an overgrowth of some kind, the effect of some not so obvious diathetic cause. He had seen localized changes in scorbutus which were very similar.

Dr. V. P. Gibney said that the changes were similar to those seen in chronic rheumatoid arthritis, which he had repeatedly seen in typical forms in children seven and eight years of age, and he did not see why it should not attack a child sixteen months old. This, however, would not explain the growth of the long bones and phalanges. His first thought was of scorbutus, but the condition would have disappeared with the child on the diet stated. Syphilis could be excluded. If pushed for an opinion he would say it was a case of multiple bone tuberculosis, a condition which could be less easily excluded than any of the others mentioned. The boggy feeling of the joints, the fact that there was effusion in the joints, and the statement that flexion of the knees and an unwillingness to walk had followed an attack of cholera infantum, all supported the view that it was an instance of bone tuberculosis. He would raise the question whether synovitis was not one of the earliest signs of tuberculosis in a child. He advised putting the child in a wire cuirass and keeping the limbs extended. It was not good to allow the child to walk.

Dr. Ketch said that primary synovial tuberculosis was rare in children.

Dr. Judson had noticed the contraction of the knees and hips, but thought it was not the result of the reflex muscular action of joint disease, and that the fact that the contractions were nearly symmetrical pointed to a more general cause than tuberculosis of the joints affected. He did not think that synovitis was an early incident of osteitis, and that primary synovitis could be differentiated by the absence of the usual signs of osteitis, which were muscular atrophy and reflex action and a prolonged history of inconstant lameness and pain. Synovitis should not be considered as liable to run into osteitis, although practically it was well to relieve a synovitic joint from weight-bearing.

Dr. Ketch said that he had rarely seen synovitis as an early sign of tuberculosis.

Dr. V. P. Gibney said that the focus of diseased bone might suffer a traumatism and thus cause an extension of the process and give rise to this outward manifestation. He recalled a case seen twenty years ago. The child's knee was full of fluid. It was thought sure to be synovitis, and a glowing prognosis of recovery in a few weeks was made, but after six or seven years' treatment recovery took place with a stiff knee. Primary osteitis with secondary synovial distension occurred before the gross signs of the osteitis which called the attention of the practitioner to some trouble in the knee. At this stage the trouble could be cured.

Dr. Elliott said that fluid in a joint immediately after a traumatism pointed clearly to a synovitis directly due to traumatism. If tuberculosis followed, it resulted from a further injury to the bone itself which made a proper nidus for the tubercular growth. In other words, a dual injury and the fluid in the joint was entirely distinct from the true tubercular lesion and in no way connected with it. The later tubercular development might delay the absorption of the primary synovial excess, and thus the latter might come to complicate the tubercular joint.

Dr. Myers had seen effusion early in tubercular joint disease, but did not consider it of diagnostic value. In spite of the fact that the patient had had apparently an anti-scorbutic and anti-rachitic diet, he could not help thinking that the trouble was due to one of these diseases rather than to tuberculosis. The child was not very sick. The principal changes were in the epiphyses and phalanges, and seemed to him to be due to some form of nutritional disease. The congested epiphyses could fully account for the pain and tenderness, but he

would adopt the suggestion made and protect the joints by keeping the child quiet.

Cases of Coxa Vara. Dr. Myers also presented a boy eight years of age who had waddled, and was walking worse every year since he began to walk. His muscles were strong. A certain rigidity of all the muscles of the lower extremities made examination somewhat difficult. The motions of the hip-joints, especially flexion and abduction, were somewhat limited. There was no dislocation, but the neck of the femur was seen in the skiagram to be bent down as in coxa vara. The diet had been very good. The boy was a little bow-legged and flat-footed.

Dr. H. Gibney found no shortening and trochanters but slightly above the line. He thought the waddling might be due to flat feet.

Dr. V. P. Gibney said that the radiograph showed forward rotation and a little bending backward of the femoral neck at its junction with the shaft.

The opinion was expressed by several speakers that the boy had coxa vara in a mild and not strictly typical form.

Dr. Elliott thought that the condition dated from early rachitis, in all probability. The picture was a logical one, and the femoral neck had changed simultaneously with the bowing of the legs, both having been more or less plastic.

Dr. Ketch said that the traces of rachitis were obvious. Coxa vara was sometimes made to include cases that were not dependent on bending of the bone. Some cases were due to deviations caused by abnormal epiphyseal growth, resulting in a change in the angle of the neck of the femur. On the other hand, the peculiar gait of coxa vara was not infrequently attributed to knock-knees or bow-legs.

Dr. Judson said that coxa vara might be considered to mean an abnormal or varous relation of the neck of the shaft, caused by lesions of different kinds, all of which were not yet recognized.

Dr. V. P. Gibney said that in coxa vara we had found one new disease or condition to rule out in our study of hip disease. Many cases of "hip disease" in adolescents which recover and have relapses, but never get very bad, having from one half to three quarter inch shortening, were really cases of coxa vara.

Dr. Ketch presented a boy, aged eleven years, who had had a limp (left leg) in winter but not in summer for three years. Pain and ina-

bility to walk on rising disappeared entirely in the afternoon. There had been no history of rickets or rheumatism. Abduction was limited, especially in flexion. Outward rotation abnormally free, trochanter one half inch above the line; no atrophy. R. 28, L. 27½. The skiagraph showed a change in the angle of the neck.

Treatment of Coxa Vara. Dr. Judson suggested mechanical means for permitting locomotion, while the affected part is relieved from the weight of the body, as long as the bone was in a growing or plastic state.

Dr. V. P. Gibney said that when the affection was single, good results could be obtained from the use of the hip-splint. He saw no objection to the wearing of a jointed splint for some months, affording not absolute but modified protection; enough to shut out traumatism.

Dr. H. Gibney said that the ischiatic crutch for this purpose was easily adjusted and comfortably worn, and allowed the limb to hang free.

Dr. Myers said that when both femora were affected mechanical protection was attended with difficulties, and it was not easy to keep the adolescent patient, like the one he had presented, quiet.

Dr. Judson suggested the use of a bicycle.

Dr. Ketch, in such a case, would improve the general nutrition and prepare the parents for a long wait.

Pain Relieved by Traction. Dr. Myers related the history of a patient, twenty-six years of age, who had suffered five and a half years from rheumatism in the ankles, neck, shoulders, elbows, and wrists, and the right hip. For the first year improvement had followed massage and medical treatment. For the past four and a half years the right hip had gradually become stiff and painful in walking. When first seen by Dr. Myers, in February, 1898, there was some spasm but no shortening. Motion of hip: Flexion, 16 degrees; abduction, 10 degrees; external rotation, 10 degrees. A short traction hip-splint was at once applied, and is still worn. There had been no pain since June, 1898, and the man considered himself greatly improved.

Dr. Ketch recalled the case of a man in whom the terrific pain of a sarcoma of the femur had not been relieved by powerful narcotics, but had been relieved for a time by traction made with a long hip-splint, and afterward, as more convenient, with a short splint.

Fracture of Neck of Femur in an Infant. Dr. Myers showed a specimen of fracture of the neck of the femur in a child eight months old.

A large amount of callus was present within and without the periosteum. There was a lateral displacement of the lower fragment inward one third the diameter of the bone. There was no change in the length of the bone. No history could be obtained except that the injury must have occurred before the fifth month.

A New Pelvic Rest. Dr. Myers also showed a pelvic rest, especially well suited for the application of spica bandages, which included the trunk and thighs, as it could remain in place until the spica was fully applied, and could then be easily withdrawn. It was made of a piece of sheet steel, $\frac{1}{4} \times 1\frac{1}{2} \times 14$ inches, bent upon itself so as to form three sides of a square. The ends were hammered out so as to form oblong planes about three inches broad and five inches long. When in use, one of the planes rested upon the table and the other supported the sacrum, while the upright connecting them was directed toward the feet.

Reviews and Bibliography.

A Compend of Human Physiology. Especially Adapted for the Use of Medical Students. By ALBERT P. BRUBAKER, M. A., M. D., Adjunct Professor of Physiology and Hygiene in the Jefferson Medical College, etc. Ninth edition. Revised and enlarged. With illustrations and a Table of Physiologic Constants. 266 pp. Price, 80 cents. Philadelphia: P. Blakiston's Son & Co. 1899.

In his modest preface to this the ninth edition of his "compend," the author says: "The continued demand for the Compend of Physiology, which has led to the preparation of a new edition, has furnished opportunity for a revision of the text in various parts of the book. The changes, it is hoped, will increase the value of the book to the student as a compact statement of some of the essential facts of physiology." The great popularity of the work shows very conclusively that the author's claims are more than verified. The press-work is excellent, and the binding just what is needed in a book intended for the character of use for which this is designed.

D. T. S.

A Handbook of Obstetric Nursing. For Nurses, Students, and Mothers. Comprising the Course of Instruction in Obstetric Nursing Given to the Pupils of the Training School for Nurses Connected with the Woman's Hospital of Philadelphia. By ANNA M. FULLERTON, M. D., Obstetrician, Gynecologist, and Surgeon to the Woman's Hospital of Philadelphia, etc. Fifth edition. Illustrated. 262 pp. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

This book is intended to cover and does well cover all the points relating to the puerperal condition and to labor that it is requisite the nurse should understand. It hardly need be said that the author marches in the very front line of intelligent progress.

First of all, she is insistent throughout on the most rigid asepsis, which is but another word for cleanliness. The topics of the book are then taken up in their order, and in a terse, pure language and a style that is rhythmical each is apportioned its due attention. After a brief allusion to the anatomy of the pelvis and its contained organs, the author takes up in order the signs of pregnancy, its management, preparations for labor, the management of the lying-in, the care of the newborn, and the ailments of early infancy, with the care appropriate to various conditions and circumstances. That the work has reached a fifth edition is abundant proof that the author has not missed her mark.

D. T. S.

Diagnosis by the Urine, or the Practical Examination of Urine with Special Reference to Diagnosis. By ALLARD MEMMINGER, M. D., Professor of Chemistry, Urinology, and Hygiene in the Medical College of the State of South Carolina, etc. Second edition. Enlarged and revised, with illustrations. 124 pp. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

Advantage has been taken of the exhaustion of the first edition of this little work by the author to make a thorough review and a careful adaptation to recent advances in urinology as applied to diagnosis. The most distinctive feature in the work is the chapter on Differential Diagnosis of Chronic Bright's Disease as Based on a Classification of the Normal Absolute, the Absolute, and the Relative Absolute of Solids and Urea. We must confess that we fail to appreciate the appositeness of the terminology used. Withal the work has claims for simplicity of style and arrangement, and it is to be hoped that the author will write more and not less carefully.

D. T. S.

Surgical Nursing. By BERTHA M. VOSWINKEL, graduate of Episcopal Hospital, Philadelphia, etc. Second edition. Revised and enlarged, with 112 illustrations. 206 pp. Price \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

The second edition of this work has been enlarged by the addition of a chapter on wounds and their complications. The nursing in special cases has also been dealt with more in detail. The well-sustained aim of the author is to give a concise outline of surgical nursing in general, together with necessary knowledge of agents used in aseptic surgery and the application of splints and fixed dressings.

It is believed there is no other work of its scope and character in the market with which it does not make a favorable comparison.

D. T. S.

A Manual of Bacteriology. By HERBERT U. WILLIAMS, M. D., Professor of Pathology and Bacteriology, Medical Department University of Buffalo. With seventy-eight illustrations. 263 pp. Price, \$1.50. Philadelphia: P. Blakiston's Son & Co. 1898.

In this manual the author has described the technique which the beginner must follow, and at the same time he has given a concise summary of the facts in bacteriology most important to the physician. The author disclaims originality for his book, offering it purely as a compilation.

And yet in a most important feature it is original in that a vigor of style and a warmth of enthusiasm are shown that evidence the fact that he has entered into the spirit of his subject and made it all his own. The author writes as one who wants you to understand what he is teaching and intends that you shall understand it, and furthermore with the confidence of one who feels that you do understand it.

He is possessed in a high degree of the powers of clear and vivid description, a most important thing in a work of this character. In addition to the usual life history and appearance of bacteria and the various methods of examining and distinguishing them, interesting chapters on Germicides and Surgical Disinfection, by Dr. Thomas P. Carpenter and Chauncey P. Smith, have been incorporated that can not fail to be useful. Taken all in all, Dr. Williams has produced quite an interesting and valuable manual.

D. T. S.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, etc. Volume I, March, 1899, Surgery of the Head, Neck, and Chest; Diseases of Children; Pathology; Infectious Diseases, including Croupous Pneumonia, Laryngology, and Rhinology. 490 pp. Philadelphia and New York: Lea Brothers & Co. 1899.

Professor Hare in this work has taken another step in the direction that the production of year-books has been traveling since their first inception. At first they were a collection of what everybody said, and principally the self-deceived and the liars, for this class, though outnumbered a hundred to one in the profession, could yet report many fold larger experiences than the truthful and discriminating. Step by step improvements have been made, and we have here a treatise on medicine enlivened and illustrated by the current experience of writers of contemporary reports. The contributors to this volume are Drs. Alexander D. Blackader, J. Chalmers DaCosta, Ludwig Hektoen, Robert L. Randolph, William S. Thayer, and Logan A. Turner.

Among the more significant points made under the head of surgery is the importance of the early operation for cancer, a matter which now needs to be impressed upon patients rather than physicians.

Operation for idiocy is discussed unfavorably and possibly unfortunately, since, as remarked by Keen, "In from fifteen to twenty per cent of the cases the operation will be happily followed by death." It is really desirable that a portion of the indiscriminating zeal for pelvic surgery should find expression in more operations of this kind where the fatal outcome is not to be regretted. Passing over many interesting subjects in which there is a general drift toward the attainment of greater accuracy and greater certainty, we come to a subject more curious than important, the form of teratoma commonly called dentigerous cysts.

Dr. Blackader, in charge of the department, seems to lean to the view

that these tumors are the result of fetal inclusions at different stages of development. He gives a case reported by Montgomery of a recurrent teratoma in the abdominal cavity of a twelve-year-old girl. Now, a recurrence of a semi-organized tumor is as essentially a reversion to a lower form as parthenogenesis, which the reviewer believes is the cause of most of these tumors. Some time ago, in reviewing another work in which a case was reported where some twenty-odd such tumors were found on different parts of the body of a patient, it was pointed out in these columns that nothing is more improbable than that twenty different fetuses at one time should be included in the body of one of these fellows. Some of these tumors can be accounted for only by parthenogenesis.

The discussion of typhoid fever turns mainly on the point of Brand's method of cold bathing, with a tendency to its modification. Dr. Hare has very prominently led such a move of late, he and his followers claiming that the more favorable statistics of recent years are probably in some degree due to more favorable hygienic and sanitary practices. The truth is, this reasoning will equally well apply to many infectious diseases. And then Dr. Hare and all other doctors might take into account the possible help we formerly gave to bad statistics with the medicines we imposed on the patients.

Passing many other interesting points, we come to the use of thyroid treatment of middle-ear disease by Valpins and Brühl, whoever they are, and who seem to have had "good results."

Dr. Macleod Yeardsley, however, has made a number of clinical experiments to control the results of others, and in his hands the results were absolutely negative.

Taken all through, Prof. Hare has good right to name his new venture "Progressive Medicine." And this is what might be expected from the character of the man and the firm, who are among the foremost in shoveling out fraud and superstition from the domain of medicine. D. T. S.

Human Anatomy. A Complete Systematic Treatise. By various authors. Including a Special Section on Surgical and Topographical Anatomy. Edited by HENRY MORRIS, M. A and M. B. (Lond.), Senior Surgeon to the Middlesex Hospital, Examiner in Surgery in the University of London, etc. Illustrated by seven hundred and ninety woodcuts, the greater part original and made expressly for this work by special artists. Over 200 printed in colors. Second edition, revised and enlarged. 1274 pp. Price, \$6.00. Philadelphia: P. Blakiston's Son & Co., 1898:

When the first edition of Morris' Anatomy appeared in 1893 it was clear that a lively race was on between it and Gray's for the leading place. A revision of Gray soon followed, and this necessitated also a revision of Morris, or at all events was followed by it.

It is not easy for any one but a thorough expert to perceive where improvement now needs to be made or could be made. The contributors to the first edition were William Anderson, H. St. John Brooks, J. N. C. Davies-Colley, R. Marcus Gunn, Arthur Heusman, W. H. A. Jacobson,

Henry Morris, J. Bland Sutton, Frederick Treves, and W. J. Walsham. The same collaborators have been employed in this edition, except that Arthur Robinson has taken the place of H. St. John Brooks and Arthur Heusman. All the requisites of a good anatomy are centered in this. First is the thorough knowledge of the subject. The writers are not only the product of the rigid methods of English teaching, but they are themselves among the foremost teachers. One might have been led to conclude, in view of the excellence of some recent text-books of anatomy, that in this branch, at least, workers might take a rest, for it was not easy to perceive how considerable advance could be made. But in this treatise a new pace has been set, and the whole field set again astir. Exhaustive of the most advanced knowledge, accurate to the extreme of refinement, and artistic to the present of typographical facility, it is a treatise that will not only meet the requirements of the most exacting students, but in the international lists will be backed with confidence and pride by English-speaking physicians everywhere.

D. T. S.

Abstracts and Selections.

ULCERATION OF VARICOSE VEINS ON THE STOMACH.—Letulle (*La Presse Méd.*, November 29, 1898) records two cases of fatal hematemesis from rupture of varicose veins in the stomach. This condition is much more rarely recognized on the stomach than on the esophagus, but is possibly sometimes overlooked. It is due to hepatic obstruction and the compensatory development of the collateral circulation between the gastric and esophageal veins. Both Letulle's cases were due to cirrhosis. The veins undergo chronic inflammation, and, as a result of fibrosis of their walls, aneurysmal pouches are developed. As a further consequence of inflammation the overlying gastric mucous membrane becomes fixed to the varicosity, and an elevated area is thus formed. From the irritation of food or from toxic or septic processes the mucous membrane may become ulcerated and the vein opened. Clinically there is no means of diagnosing this condition.—*British Medical Journal*.

IODIDE OF POTASSIUM IN HEMORRHAGIC ENDOMETRITIS.—Silvestri (*Gaz. degli Osped. e delle Clin.*, November 20, 1898) draws attention to the value of iodide of potassium in the treatment of fungous endometritis and the metrorrhagia of uterine fibroids. He records five cases, in each of which, with one doubtful exception, syphilis could be excluded, where the administration of moderate doses of KI brought about a cure. The author further recommends the use of this drug in habitual abortion when threatening, or as prophylactic agent. The mode of action is somewhat uncertain; it may be in virtue of its absorbing powers, or through improving the state of the blood, depressing the heart, and as an aphrodisiac moderating the function of the genital organs, and thence the reflex congestion.—*Ibid*.

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TUBERCLE BACILLI IN PUBLIC CONVEYANCES.

In the *Revue d'Hygiene*, January, 1899, Dr. Petri publishes an ordinance of the Minister of Public Works of the Russian Government giving minute directions for the cleansing and disinfection of railway cars and waiting-rooms in Russia. This is the inspiration of a valuable editorial, Boston Medical and Surgical Journal, March 23d ultimo, on the danger of tubercular infection to those who ride in public conveyances, and the remedy therefor.

Cornet's experiments had called attention to the infectious character of the dust of ordinary apartments occupied by consumptives. Dr. Petri and his assistants, Drs. Kolb and Friedrich, made a very striking series of experiments in 1892 in consequence of the arrival in Berlin of a great number of consumptives, who hurried to that city for treatment upon the unfortunate premature announcement of Koch's celebrated discovery of tuberculin.

The very clever experiments and their startling results are as follows:

The object of the experiments was to determine: (1) the presence of tubercle bacilli; (2) their relative number; (3) the best method of cleansing and disinfecting the cars.

The dust of the walls, ceiling, and furniture of the cars was collected by means of small, slightly moistened sponges, and guinea-pigs were inoculated with the same. The dust of the floors was deemed to be less dangerous than the fine dust deposited at higher elevations. Collections were made from first, second, third, and fourth-class cars, and from the sleeping-

coaches. One hundred and seventeen animals were inoculated, and three of them succumbed to tuberculosis, these having been inoculated with dust from the floor of the sleeping-cars, the source of infection being the sputum upon the floor of the car.

The examinations were made immediately after arrival at a terminal station, and 383 compartments in all were examined.

Many other pathogenic germs were also found, which also proved fatal to animals employed in the experiments.

Number of Germs. On the wooden floors germs were found as follows:

In cars of the fourth class, 12,624 per square of 100 centimeters.							
"	"	third	"	8,481	"	"	"
"	"	second	"	4,347	"	"	"
"	"	first	"	2,583	"	"	"

The ceiling contained the least number.

Experiments were also made to determine the efficiency of proposed methods of cleansing and disinfection. Three coaches were first infected with different sorts of germs, and were then disinfected with soap and carbolic acid solutions.

These experiments showed a diminution in the bacilli, and in the case of the material disinfected with steam, the disinfection was complete.

The results of the final experiments were summarized as follows:

The system of cleansing, consisting in washing with a potash-soap solution (1 to 100) followed by an abundant rinsing or sprinkling with water, and then by dry rubbing, is sufficient to remove all disease germs from the top, sides, and seats of third and fourth-class cars (not upholstered), even though badly soiled. A similar cleansing with soap is sufficient to cause a decided reduction in the number of germs upon the floors of such compartment cars.

Dr. G. Lepage calls attention to the need of disinfection of hacks, omnibuses, and railway cars in Paris, and the absence of such work at present. He urges its adoption by the authorities before the Exposition of 1900, and proposes a commission for this purpose.

It is the dream of the hygienist that tuberculosis will in time be stamped off the earth, and nothing can more forcefully favor such a consummation than experiments like the above and beneficent hygienic ordinances based upon them. In the management of tuberculosis therapeutics is impotent, but hygiene is rapidly demonstrating her power to successfully cope with this greatest destroyer of human life and happiness. The above paper should be put in the form of a sanitary tract and scattered broadcast over the civilized world; for little progress can be made by the sanitarian until the people are fully awake to the danger of tubercular infection and its remedy.

Notes and Queries.

STANFORD, KY., April, 1899.

To the Editor of the American Practitioner and News:

The Forty-fourth Annual Meeting of the Kentucky State Medical Society will be held in Liederkrantz Hall, in the city of Louisville, May 17th-19th. The program, laden with contributions, has been distributed to the members and the profession generally throughout the State. It shows an immensity of scientific work to be presented at this meeting. The most fastidious specialists and general practitioners can not fail to be pleased with the deliberations of this intelligent, earnest, philanthropic body of men. Every qualified doctor is earnestly invited to be present, and will be welcomed as a member. This is a duty every physician owes to the parent society and to himself. He should have membership, and by his loyalty and devotion, by adhesion and determination the State Medical Society will have a never-ending career of unalloyed usefulness and prosperity. Each doctor in attendance at this meeting will get an experience to be found in no other medical society in the State—in which there are so many good organizations—and gather ripe fruits of judgment and wisdom which time can not efface. There is nothing to dim the brightness of this annual assemblage; the vigor of the Society is unabated.

The Committee of Arrangements should be heartily tendered thanks for their efficient preparations for this meeting. Every thing is now complete, and, to use a mixed metaphor, the rank and file are in fine fettle, only waiting for the bell to tap and be off. We bespeak the largest gathering and most successful session in the Society's eventful history.

Yours obediently,

STEEL BAILEY, M. D.,

Permanent Secretary Kentucky State Medical Society.

THE PURPURA OF CHILDHOOD.—At the recent Congress on Gynecology, Obstetrics, and Diseases of Children, held in Marseilles, Dr. Leon Perrin discussed the pathological significance of purpura in children. This term, he reminds us, no longer stands for the name of a disease but of a symptom. The condition of blood-stasis which it denotes, whether merely an intense congestion with capillaries unruptured or a true extravasation, is in the great majority of cases due to an infective process—a toxemia. Even the rheumatic variety, he maintains, ought to be relegated to the same series as those of obviously septic origin as being also toxic, though by means of a different toxin. Purpuras associated with syphilis, with the eruptive and other infectious fevers, with septic pleurisies and pneumonias, are necessarily of this character. In the same connection a reference to two cases in which the presence of staphylococci was demonstrated in the blood is

interesting. Dr. Perrin also quotes the observations of de Boeck-Renher, Hutinel, Le Gendre, and others to prove the frequency with which the tonsil serves as the chief point of entrance for the germs of disease. But whether this gland, or the skin, or the gastro-intestinal canal provides the nidus, the later action of toxic products is essentially the same in all cases. They penetrate the tissues, alter the composition of the blood, and by attacking either directly the capillaries or indirectly the vasomotor centers, reveal their presence by the sign of purpura. Neither is the influence of the non-vital agents without significance in this connection. Various drugs—mercury, iodoform, arsenic, and others—afford the same purpuric signs after a period of use, and they doubtless act by means of the same physical mechanism. Cachectic and other allied morbid states also do this by developing a variety of auto-toxins. Purely physical and metaphysical forces—as cold, emotion, etc.—have, on the other hand, merely a predisposing effect. Not the least interesting details in this interesting paper are those relating to age. Purpura, as is well known, is very frequent in childhood, more so than in adult life. In this respect it resembles the eruptive fevers. From four to ten years is the most usual age-period for its appearance, though it is fairly common up to twenty. Dr. Perrin, however, quotes cases observed by Steffen, some of which occurred at a much earlier stage of life—viz., one at thirty-six hours, one at eight days, one at a fortnight, one at six weeks, and sixteen from three to nine months after birth.—*Lancet*.

A CASE OF TRADE PARALYSIS.—Ch. Féré (*Belg. Méd.*, September 15, 1898) points out that while trade spasms are comparatively common, trade paralyzes are much less so. He narrates the case of a girl, aged 14, a tapestry worker, whose work necessitated her keeping the right arm constantly elevated and abducted. After twelve days of this work signs of paralysis began to appear in the right arm, and soon became complete. There was no anesthesia of the affected limb, and no evidence that the girl was hysterical. Under massage and electricity the patient recovered. It is to be noted that the paralysis affected the whole arm, and not simply the group of muscles concerned in the trade movement, in this respect differing from trade spasms. There was also idio-muscular contraction of the paralyzed side. This Féré looked upon as a reaction of muscular debility, such as is seen in exhausted cyclists.—*British Medical Journal*.

THE ARTIFICIAL FEEDING OF INFANTS.—Gregor (*Deut. med. Woch.*, October 6, 1898) speaks of the value of a malt soup in the feeding of infants with gastro-intestinal affections. He has used it in more than one hundred cases. In seventy-four very young infants the observations were extended over several months. Here the soup was given out in bottles in the polyclinic. The hygienic conditions of these infants were very unsatisfactory, and yet the results were good. The development was arrested, and severe gastro-intestinal symptoms were present. In 27 of the 74 cases a complete recovery ensued, so that the patients were free from symptoms for many

months; 18 infants still under observation were so much improved that they might be looked upon as cured; 13 cases were much improved; in 3 cases there was no improvement. Of the 74 cases, 13 died, death being due in 6 cases to intercurrent disease. The results obtained with this malt soup were much better than those obtained with Gaertner's fat-milk preparation. The malt soup contained but few bacteria. The mothers were told to keep it at 10° to 20° where it was possible. Thirty-four of the 74 cases were from 3 to 9 months old, and 23 under 3 months. In infants over 3 months, with chronic gastro-intestinal affections, this malt soup should be tried and continued for several months. In younger infants it requires dilution. In children from 9 to 15 months with severe rickets this feeding should be tried. In artificially-fed children in whom the nutrition is less satisfactory than in breast-fed children this malt soup gives as good results as other artificial foods. Feeding at the breast may be supplemented by one or two meals of this malt soup. Keller (*ibid.*, September 29, 1898) describes the method of preparing this malt soup: 50 g. of wheaten flour are well mixed up with $\frac{1}{3}$ litre of cow's milk and the mixture passed through a sieve. In another vessel 100 g. of malt extract are dissolved in $\frac{2}{3}$ litre of water at 50° C., and to it are added 10 c.cm. of an 11-per-cent solution of pot. carb.; these two preparations are then mixed and boiled:—*Ibid.*

THE UNTOWARD EFFECTS OF DRUGS.—George F. Butler (Medicine, October) says practitioners are too apt to refer any untoward effects produced by drugs to defects or impurities. Predictions may be made with considerable accuracy as to such effects in regard to any particular drug from a knowledge of its action, of the organs chiefly affected by the ordinary action of the drug and the methods of drug excretion. An antipyretic will have, as untoward effects, skin eruptions, because it is excreted through the skin, because the skin through its pores regulates temperature, and hence is under the control of the central nervous system, regulating temperature; and finally because the skin is in close connection from an early period with the nervous system. For the same reason profuse debilitating perspiration often results. Since control of the temperature can not be effected without control of the vasomotor system regulating the blood supply, heart failure, collapse, and palpitation may result, together with certain eye and ear symptoms. If the drug is one which tends to cause slight brain vasomotor disturbance, such as results from what is known as tonic action, then delirium, blindness, and deafness of a temporary character are produced. Temperature in the human subject is regulated by the three systems of nerves: thermo-taxis or heat-regulating, thermo-excitatory or heat-increasing, and thermo-inhibitory or heat-decreasing. As more or less exact balance is kept by these centers, undue action of any of them constitutes a morbid state. If the thermo-inhibitory centers are too much stimulated, they may lose their control; hence, in certain

individuals, temperature rises from an antipyretic. The action on the heart may, by its influence on the kidney circulation, cause kidney and bladder symptoms, even to the extent of albumen in the urine. If the antipyretic is excreted through the kidneys, albuminuria is especially likely to present itself as an untoward result. Alteratives and purgatives produce hemorrhages from the mucous membranes, and edema of those of the organs of special sense, besides skin eruptions. Hypnotics, through their action on the central nervous system, produce excessive perspiration, skin eruptions, vertigo, and heart collapse. Astringents cause diarrhea and bloody intestinal discharges. Diaphoretics cause pains at certain points from over-stimulation. In classifying tonics and alteratives together, the influence of the trophic nervous system, evident in the constitutional changes produced by diseases like typhoid fever, must be taken into account. Alterative drugs have much the same constitutional effect, according to the theory of their action now coming into general acceptance.—*Ibid.*

VAGINAL PESSARIES.—Augustin Goelet (Virginia Medical Semi-Monthly, August, 1898) puts much good advice concerning the use of vaginal pessaries into a series of axioms: Never use a pessary except as a temporary or auxiliary support. Never permit a patient wearing a pessary to pass from under observation. Never retain a pessary if it is causing the least discomfort. Daily vaginal douches are necessary. Never introduce a pessary unless the uterus is freely movable and can be replaced by manipulation. Never fail to seek the cause of the misplacement and endeavor to remove it. The pessary alone will not cure.—*Ibid.*

ORGANISMAL CONTENTS OF THE LUNGS.—Barthel (*Centralbl. f. Bakt.* xxiv, 11-12) submits Dürck's statement that the healthy human lung is, during life, rich in bacteria to a searching examination, and comes to the following conclusions: (1) The finer bronchioles and the air vesicles are free of organisms; (2) the trachea and the bronchi of moderate caliber exhibit upon their surface both pathogenic and non-pathogenic organism; (3) as compared with the flora of the mouth and fauces, there are more pathogenic organisms in the trachea and bronchi. This difference in proportion may be due to the multiplication within the bronchi of the pathogenic varieties, which are known to grow better than the merely saprophytic ones at the temperature of the body, and also to the excretion of these organisms during disease into the bronchi from out of the blood stream or lymphatics, an event the possibility of which has been demonstrated. These organisms tend to be removed by the ciliated epithelium, and to be rendered inert by freshly-secreted mucus; but if their epithelium or the mucous follicles be in any way injured, the bacilli gain entrance into the substance of the lung. The diplococcus lanceolatus appears to be more often present than all other varieties, and to be one of the most virulent.—*Ibid.*

Special Notices.

IN cholera infantum the Imperial Granum Food has proved of priceless value, being often the only nutriment found suitable and capable of being retained. Thousands of lives have apparently been saved by its use, and it has seemed to possess not only nutritive but medicinal value, so immediately soothing and quieting was its effect. This shows the vital importance of such a nutriment, one that is pure, natural, and unsweetened, and that can be easily and quickly assimilated even when the digestive powers are impaired by disease.

WE are in receipt of a beautiful lithographed pamphlet from the ever-enterprising Mr. Henry, of Louisville, who, in a letter, informs us of his now being the principal owner of the famous French Lick Springs, of Indiana; capacity, 500 guests. The celebrated Spa "Pluto," America's Aperient, he will introduce at once through the medical press as the most saline hydrogogue eliminant and intestinal antiseptic akin to Carlsbad, without the accompanying nausea and thirst.

E. N. CAMPBELL, M. D., Good Hope, Ill., says: I have used Aletris Cordial in threatened miscarriage, and find it one of the finest and most efficient preparations that it has been my privilege to prescribe. Aletris Cordial should be used more than it is, although it is largely prescribed, yet like its twin sister, Celerina, it is not prescribed often enough to prove its efficiency. Most all cases that these preparations are used in are of a chronic type, and those that require patience to relieve; hence, if these two remedies are taken regularly and persistently, according to the case, they will satisfy all concerned.

WHEN PAIN IS DOMINANT.—A number of years ago, in a conversation with my old friend, Professor Stucky, of Louisville, he told me that he used far less morphine now than formerly, and that he was able to combat the factor of pain as successfully in the majority of cases without it as he did with it. He urged me to give antikamnia to my patients who had neuralgia, la grippe, rheumatism, locomotor ataxia, and dysmenorrhea, instead of using morphine. I acted on his suggestion, and have been able to relieve this class of patients as effectively and without producing the evils that result from the exhibition of opium or its alkaloids. Antikamnia possesses anodyne, antipyretic, and analgesic virtues, and has been thoroughly tried by able therapeutists. Professor Shoemaker, of Philadelphia, has found it very valuable in rheumatism, migraine, or neuralgic headache, and many other nervous affections.

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"NEC TENUI PENNĀ."

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No. 9

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

DISLOCATION OF THE CERVICAL VERTEBRÆ, FOLLOWED BY MANIA AND DEATH: REPORT OF A CASE.*

BY THOMAS L. BUTLER, M. D.

Demonstrator of Operative Surgery and Surgical Dressings, University of Louisville.

In lieu of a written paper I want to report a case that was of unusual interest to me, and I think will be more or less interesting to most of the members, as it has several unique features.

The patient, Mr. W. W., aged thirty years, was admitted to the City Hospital on the afternoon of November 12, 1898; he was first seen by me about six o'clock in the evening.

The history of his injury was about as follows: He had been following his occupation, that of Western Union lineman, during the day. In the afternoon he was inspecting a line from the rear of a train. As I understand it, he was riding on the rear platform with his face toward the door of the car, looking upward inspecting the line. This, I believe, is the reverse of the usual order. He lost his balance and fell backward, striking on the back of his head, bending his neck forcibly forward.

When seen by me there was little or no evidence of bruising other than a few scratches on his face. His head was drawn slightly to the left side; the right pupil was normal; the left was dilated but responsive to light. There was complete paralysis of motion in his right leg. Sensation was apparently unimpaired. There was a modified function of the right arm which seemed to be particularly noticeable as regards

* Read before the Louisville Medico-Chirurgical Society, April 7, 1899. For discussion see page 346.

abduction. His face was markedly flushed, about the condition seen from an overdose of atropia. I have no record of his pulse, temperature, etc., at that time, but taken two hours later it showed temperature 99° F., pulse 90, respiration 28. The head could be brought over to the median line, that is, it could be brought straight, with great pain to the patient, but it could not be bent to the right side.

In putting him on the examining-table in the erect posture it was found that the head could be rotated slightly, and we could get fairly good antero-posterior movement. Putting my finger in his mouth, an irregularity of the posterior pharyngeal wall could be distinctly felt.

The patient was seen again at 9:30 P. M. with Doctor Roberts. We agreed as to injury of the cervical vertebræ with probably an intracranial complication, and thought it best to wait further developments.

The chart shows that at 10 P. M. same date the patient was very restless, with a pulse of 120. I neglected to state that the patient's mental condition was only fairly good. He would answer questions when asked, but not always in a rational way. He had no idea of his whereabouts, thinking that he was in Eminence, Ky., this being his temporary home and about where he fell off the train.

The next morning, November 13th, at 8:30, pulse 64, temperature in the axilla 99.8° F., respiration 30. He had slept but little during the night, but was quiet most of the time. He had perspired freely during the morning hours. He voided his urine involuntarily, which he did throughout the entire time. At 6:30 P. M. the same day his pulse was 64, temperature in the axilla 99.25° F., respiration 20. Doctor Barker, of the City Hospital staff, telephoned me later in the evening that he thought paralysis of the right arm was getting more marked, and we determined to operate the next morning.

November 14th, morning of the operation, at 9 o'clock his pulse was 64, temperature in the axilla 99.8° F., respiration 26. The patient had a fairly good night, having slept several hours. He was given an enema, which was followed by a large fecal evacuation; he was then brought into the operating-room. The blush of which I have spoken was very marked at this time, not only on the face but almost over the entire body, especially on his back. We cut down over the cervical vertebræ, and found quite a marked separation of the first and second vertebræ; the posterior, capsular, and right lateral ligaments were torn; there was slight displacement to the right side, that is, the first cervical vertebra was displaced somewhat to the right. I do not see

how this could be true in a marked way without a fracture of the odontoid, which he evidently did not have. By manipulation, extension, and counter-extension we were able to get the vertebræ in very good position, and tied the first and second together by passing a heavy silk ligature underneath the posterior arch of the first cervical, through the spinal foramen between the bone and the dura, and underneath both spinous processes of the second cervical vertebra. The parts were gotten in good position and maintained by a stout silk ligature. There seemed to be a slight separation between the second and third cervical vertebræ, but it was only slight, and no attention was paid to it.

At 5:30 the evening of the operation, November 14th, pulse 96, temperature 103.8° F., respiration 34; at 9:15 P. M., pulse 96, temperature 101.4° F., respiration 30. Patient very restless that night.

On November 15th, at 9 A. M., pulse 84, temperature 102.4° F., respiration 30; at 9 P. M., pulse 80, temperature 102° F., respiration 26. The temperature had been as high as 103° F. during the day.

November 16th, 9 A. M., the patient had had a good night, sleeping nicely, only awakening to ask for water; pulse 80, temperature 102°, respiration 24. During the day the patient passed his feces involuntarily, which he continued to do throughout the entire time. The wound was dressed and the gauze drainage removed.

November 17th, 9 A. M., pulse 74, temperature 98.8° F., respiration 30. The patient had had a bad night; he was delirious most of the time; this delirium was marked throughout the entire time from this period on to the end. I never saw him after this when he was able to give an entirely sensible answer to any question, although the attendants stated that he frequently answered rationally.

I now found that the patient had been on quite a spree for some time previous to the injury, and we then thought this probably was delirium tremens, but the subsequent history of the case rather rules this out. Later on in the case the man had to be tied to the bed to keep him from tearing off the bed-clothes. He would always answer when spoken to, and seemed to desire some one close by him all the time; this was about the only way he could be kept quiet.

November 18th, 19th, and 20th to the 22d, the pulse range was from 70 to 90, temperature from 98.4° F. to 100° F., respiration from 20 to 30. Sometimes the temperature was slightly higher than stated. The eye symptom remained the same as when first seen. About this time the arm began to improve, which improvement steadily increased until he

was able to put his hand on the top of his head without any trouble; but he never seemed inclined to use his right arm as he did his left.

From November 23d to 30th inclusive the pulse range was 70 to 80, temperature practically normal, respiration 18 to 20. Only once during that time did the temperature go as high as 99° F. About December 1st he began to move his head; he could raise his head up, and in fact get almost any motion; this improved gradually until he could use his head freely, move it to the right side, or put it in almost any position desired.

The man went along until December 11th with pulse, temperature, and respiration about normal. He was very delirious, and seemed to be getting more so all the time; he also grew more noisy. He now could not draw the right leg up, but if it were placed in a flexed position he could straighten it out. This is about as far as improvement in leg progressed.

From December 11th to 15th his temperature ranged from 97° F. to 99.6° F., with a steadily increasing pulse. On December 19th his pulse had risen to 108, temperature 101° F. December 21st his pulse was 100, temperature 102° F., respiration 26. The same day his pulse went up to 156, with a temperature of 105° F., and on the following day the patient died; just before death the temperature registering 108° F. in the axilla. I will state here that the wound had suppurated quite a good deal, especially during the last few days.

A post-mortem was held, at which I was not present, but it showed practically little or no trouble with the brain. I suspected that there was some serious lesion of the intra-cranial structures, and that perhaps I had not done my whole duty in not opening cranium, but the post-mortem showed no trouble with the brain except some evidence of congestion. The wound about the neck showed hardly any tendency to heal. The ligature was in position, but there was considerable displacement. The ligature had cut its way through the soft tissues and into the bone, and had really cut off part of one of the spinous processes of the second cervical. There was apparently no injury to the cord. The ligature was in position, showing that there had been no harm done to the dura, the ligature being clearly between the dura and the bone. There was no fracture, but separation and incomplete dislocation.

LOUISVILLE, KY.

**A CASE OF EXTRA-UTERINE PREGNANCY : OPERATION :
RECOVERY.***

BY LEWIS S. McMURTRY, A. M., M. D.

Professor of Gynecology and Abdominal Surgery in the Hospital College of Medicine, Louisville.

Increasing experience in the operative treatment of extra-uterine pregnancy has demonstrated the truth and accuracy of Mr. Lawson Tait's observations. All forms of gestation originating outside the uterine cavity are primarily and essentially of the fallopian tube. All former teaching that ectopic pregnancy was of various types, tubal, ovarian, and abdominal, has fallen to the ground, and this entire subject, of such vital surgical import, and formerly so complicated and obscure, has been made simple and clear. This result is wholly due to the labors of one man, Mr. Lawson Tait, and will ever remain an imperishable monument to his genius. Like most eminent advances in our art, but little has been added to his original elucidation of the subject; and, despite all dispute and controversy, the true pathology and treatment, as presented by Mr. Tait, are confirmed by increased research and surgical experience.

Ectopic pregnancy was formerly so confused with other supposed hemorrhagic peri-uterine tumors as to mislead altogether the student of intra-pelvic pathology. Under the varieties of hematocele, blood accumulations within the pelvis were attributed to various causes; now we know that except in rare instances all these are due to rupture of the gestation-sac of tubal pregnancy.

Various causes have been assigned for the fertilization and development of the ovule in the fallopian tube instead of in its normal habitat, the endometrium. According to Webster, tubal pregnancy may be attributed to the fact that in the earlier type of mammalia the uterus was bicornate, which type is represented in the human subject by the fallopian tubes; that in some women there is structural reversion to the former type, and therewith the liability to tubal pregnancy. While this theory is rather plausible, it does not explain the process satisfactorily. The views of Mr. Tait upon the mechanism of the process accord more with established pathology and clinical observation than any as yet offered. Mr. Tait attributes this accident to a desquamative salpingitis, which by denuding the mucous membrane of its epithelium begets a condition of the tubal mucous membrane analogous to that of the endometrium after menstruation. This explanation of the

* Reported to the Louisville Medico-Chirurgical Society, April 7, 1899. For discussion see page 335.

etiology of tubal gestation is, however, problematical for the most part, but accords more with clinical facts than any other theory. The common clinical observation that tubal pregnancy is so often preceded by a period of sterility tends to corroborate this view of the subject.

The treatment of tubal pregnancy has not been improved by any modification of Mr. Tait's methods as yet offered to the profession. From the very nature of the accident, and the fact that cases are presented to the surgeon in every phase and stage of the process of rupture and circumjacent inflammatory changes, the diagnosis as to details of complications must of necessity be perfected after the abdomen is opened. No better illustration of this fact could be found than in the case I herewith report; the gestation-sac was so attached to the colon by adhesive peritonitis that in separation even with the utmost care the intestinal coats were stripped through to the mucosa. Seeing the precise extent of injury to the intestine, it was accurately repaired at once, and did not in the least complicate the patient's recovery. Such precision of operative technique can only be attained when operation is done by supra-pubic abdominal section.

The specimen I here present, and which has furnished the suggestion of these remarks, was removed in a case at my clinic at Gray Street Infirmary one week go. The patient, a white woman twenty-two years of age, was referred to me by her physician a few days preceding. She was suffering with an active peritonitis, and had been quite ill for three weeks. Upon examination the pelvis was found to be packed with a firm mass, and the uterus pushed far away to the right side. Two menstrual periods had been missed, but the history as to tubal rupture was vague. The diagnosis was based in great part upon the shreds of decidua which appeared in the sanguineous uterine discharge existing at the time of my examination.

Upon opening the abdomen the results of long-established peritonitis were apparent. The omentum capped over the pelvic basin, and all peritoneal surfaces were adherent. Separating adhesions, a large disorganized blood-clot was scooped out, and the ruptured sac here presented was separated. In this step of the operation, as already stated, extensive denudation of the intestinal wall was unavoidable. The ovarian vessels were carefully secured and ligatured, and the sac cut away. After separating all adhesions the injured intestines was sutured, the toilet carefully made, all organs restored to normal position, and the abdomen closed. An examination of the specimen shows the point

of rupture of the sac. The fetus was not found in the blood-clot, and had doubtless been digested by the peritoneum. The tube, it will be observed, is enormously dilated, forming the large sac, and thickened by superimposed layers of inflammatory exudate. The patient had been reduced to a very feeble state by hemorrhage and peritonitis, and I utilized with great advantage intravenous transfusion of decinormal saline solution during the operation. She reacted promptly, and her condition has been most excellent through the first week of convalescence now passed. Her recovery is now fully assured.

LOUISVILLE.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, April 7, 1899, the President, Thomas Hunt Stucky, M. D.,
in the chair.

Dr. L. S. McMurtry showed two specimens: first, ectopic gestation; second, an appendix. [See page 333.]

Discussion. Dr. T. S. Bullock: There is only one point to which I desire to call attention, and that is with reference to the remark made by Dr. McMurtry as to the site of impregnation. I believe that the most frequent site of impregnation is in the tube, and that these ectopic gestations are caused by some interference with the passage of the impregnated ovum to the uterus, and that all extra-uterine pregnancies are primarily tubal.

Dr. Turner Anderson: It seems to be the accepted idea in the profession that all those conditions that we used to designate as extra-uterine hematocle, etc., are now regarded as cases of ectopic gestation. I think it would be a little difficult, however, to determine the question from the gross appearance presented by the specimen whether we have a case of hematosalpinx or an extra-uterine pregnancy. Unless we had a demonstration, if it were possible, by the microscope of the chorionic villi there must be some doubt as to the exact nature of these cases. In this case it looks as though there were a direct communication with the distal extremity of the tube, and pregnancy must have occurred in the ampulla, that the end of the tube was open, and the

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

gestation progressed, as also did some inflammatory process in the tube, until there was a thickened mass which became adherent and walled over by the omentum. Unless one had great experience he would not recognize by putting the finger on this specimen that it was one of ectopic gestation. I suppose the microscope would settle the question, and we ought in that way to differentiate between an ordinary dilated tube and a case in which gestation has occurred and the chorion has developed to such an extent that the elements which enter into the gestation process would present themselves. I recently showed before the Louisville Surgical Society a specimen where there was a tube in which was a large blood-clot, the distal extremity firmly adherent and entirely obliterated, the tube very much dilated. It was simply a blood-clot. Perhaps that was a case of ectopic pregnancy, but I was under the impression that it was simply a case which we recognize as hematocele. The fact that the other tube and ovary were in such a healthy condition that the doctor did not deem it wise to remove them shows that this woman had perhaps never been infected, and that she did not have an ordinary case of chronic salpingitis.

Dr. Louis Frank: Like Dr. Bullock, I am inclined to accept the theory advanced by Lawson Tait that all of these cases of hematosalpinx or hemorrhage into the tube itself are undoubtedly due to impregnations in the tube. I do not believe that we ever have hemorrhages into these structures, excluding, of course, those rare instances of hemorrhage into the ovarian structure, and more rarely still rupture of the ovary from this cause, unless it is due to tubal pregnancy. Unlike Dr. Anderson, I think from the macroscopical appearance of this sac alone that we would not take it to be a pyosalpinx, which it is not, and there is nothing else we could have here except hematosalpinx or hydrosalpinx. I have never seen an appearance like this in a case of pyosalpinx. The appearance of the inner wall of the sac is entirely different from the smooth surface which we find in those cases where there is a collection of pus or a collection of serum in the tube. I take it that the sac shown is largely made up of the tube itself, and I dare say if microscopical sections were made we would find it composed of the muscular structures, etc., which are found in the tube.

As to the pathology of extra-uterine pregnancy, my experience has been too limited to allow me to draw any deductions therefrom; but I believe in these cases it is not always necessary to have a diseased tube, and in instances such as we have here, where impregnation has

taken place near the end of the tube, the ovum would have arrived at such a stage of development that it could not pass down into the cavity of the uterus. Instances have been reported where the tube upon one side and the ovary upon the other have been removed, were undoubtedly some length of time must have elapsed before the impregnated ovum could have passed down the tube, and where extra-uterine pregnancy has occurred in the opposite side, which remained after the operation. I am inclined to think in the presented case the tube may not have been primarily diseased, as no evidence of disease was found on the opposite side; that impregnation took place high up in the tube, and the impregnated ovum was unable to find its way through the isthmus or small portion of the tube itself. As to what the specimen is, I think there can be no question, even from its macroscopical appearance.

Dr. L. S. McMurtry: In regard to the identity of the condition, I think there can be no doubt in the world, especially if the gentlemen had seen it *in situ*; it was very characteristic of the lesions of ectopic gestation, the disorganized blood-clot that occupied this sac, a condition altogether different from the ordinary salpingitis or hematosalpinx. This is in a certain sense an hematosalpinx due to extra-uterine pregnancy. Then there was the additional confirmatory evidence of missed menstrual periods, discharge of decidua from the uterus, etc. The uterus was enlarged, as is characteristic in cases of extra-uterine pregnancy.

Colloid Degeneration of a Multilocular Ovarian Cystoma. Dr. A. M. Vance: Four weeks ago a young woman, twenty-four years of age, came to me from Virginia with the history that she had noticed an enlargement of the abdomen two weeks before, and had been sick for that length of time, having taught school up to within a week before I saw her. She presented an abdomen which was fully the size of a pregnancy at full term, with a tumor lying across it reaching up to the region of the umbilicus, that felt very much like a gravid uterus with the child crosswise. She had a pulse of 132 and a temperature of 103° F. I thought it was probably a large dermoid or ovarian cyst, which had suppurated or had twisted upon its pedicle, and had set up some inflammatory process. In order to verify this, not wishing to make a vaginal examination, the woman being unmarried, I made an examination through the rectum, and found the virgin uterus lying pressed

down upon the rectum and perfectly fixed in that locality. I opened the abdomen and found the growth which I present. As you will observe, it was broken up in order to get it through a small incision. It turned out to be a multilocular ovarian cystoma, with a number of different kinds of colloid material in the numerous cysts. There was present quite an inflammatory condition in the whole abdominal cavity, seemingly a great deal of peritoneal fluid that was very thick, and the intestines were adherent to this sac over almost its entire superior aspect. Here is one part of the sac that was beginning to necrose. The intestines presented a condition similar to that of a granulation process. This was also true of the great omentum and the mesentery; wherever it touched this growth and had become adherent there was apparently a granulation process. I found considerable pus, several small cysts that I show you having suppurated.

The woman was gotten off the table in bad condition; she was washed out with a great quantity of normal salt solution, and quite a little of this solution was left in the cavity. I drained with a glass well in Douglas' sac, and also a large wick of gauze surrounded with rubber tissue. The glass tube was removed at the end of six hours, and the gauze drain at the end of sixteen hours. The woman made an absolutely uninterrupted recovery, the temperature leaving her entirely within a few hours, and her pulse went down to 54. It remained at 54 so long as I was giving her strychnine. When I would stop the strychnine it would go up to 72 and remain there. This is the first time I have ever seen strychnine act in this way.

It is an interesting specimen to me from the fact that the woman made such a perfect recovery, and was able to walk about the hospital at the end of the sixteenth day, with the wound absolutely cicatrized. There was a very thin pedicle as wide as my three fingers.

Discussion. Dr. J. G. Cecil: I saw this specimen when it was fresh, and it presented a great many of the characteristics of malignancy. As will be observed, the various cysts contain a large quantity of semi-solid, glue-like material.

Dr. L. S. McMurtry: I congratulate Dr. Vance upon the result, as the operation was an exceedingly difficult one. It is not an uncommon thing to see in one single tumor a dermoid cyst, a colloid cyst, clear cysts, and suppurating cysts. The condition of the peritoneum, as described by Dr. Vance, is also characteristic of tumors that are undergoing inflam-

matory changes, where the peritoneum, intestines, etc., have the appearance of granulation tissue. These cases are the most favorable in results of any large tumors that occur in the abdomen; the pathological condition disappears as soon as the tumor is removed. I have seen a great many tumors of this kind wherein malignancy has been suspected or diagnosticated, and such prognosis rarely realized, especially in young women in whose tumors there were no papillomatous cysts.

Cystic Disease of the Ovary. Dr. Turner Anderson: This specimen was removed from a patient sent to me from Bowling Green, Ky., six weeks ago. She is thirty-four years of age, unmarried, and had been a chronic sufferer for more than five years. She had been compelled to abandon her occupation of school teacher on account of continued suffering. Her menstrual history was one of discomfort and suffering, and at each recurring menstrual period her dysmenorrhea was pronounced, and she was compelled to keep her bed for several days. An examination per vaginam showed a retroverted uterus with prolapsed ovaries. There was marked tenderness, and I was unable to reposit the uterus, the tenderness being so decided, although it did not appear to be particularly adherent. Under these conditions, a prolapsed ovary with a history of chronic ill-health, I thought I was justified in advising operation.

I present the specimen removed at the time of the operation, six weeks ago. It shows a cystic condition of the ovaries. There are some typical cysts clinging around in every direction. The operation was a double oöphorectomy without incident. The patient went home in three weeks after the operation. She left the hospital in two weeks, and returned home a week later. The abdomen was closed in the ordinary way with buried silver wire, which up to this time has given no trouble.

Report of a So-called Miracle. Dr. A. M. Vance: Last summer a young woman was brought to me from Louisiana who gave this history: She was twenty-three years of age; when she was fifteen years old she had a little trouble with her knee, some pain, just about the time when she commenced menstruating. She consulted a physician, who put the leg in a plaster-of-paris dressing. This dressing was kept on a few weeks, and she got well. Six months afterward she had more pain in the same knee, and the physician reapplied the plaster-of-paris dressing. Finally she drifted to Atlanta, Ga., and at a surgical institute

there the contraption I show you or a similar one was put on. The contrivance consists of a cumbersome splint or brace which extends from the hip down to the foot, so arranged that the weight of the body is thrown upon the tuberosity of the ischium, and no weight upon the foot. She came into my office on two crutches, wearing this brace-extension apparatus attached to her shoe. She had been rendered very unhappy and miserable by the deformity of the brace and being forced to walk with crutches, and upon examination I immediately came to the conclusion that there was nothing the matter with her. She showed a great deal of sensitiveness when I commenced the examination, and cried when I manipulated the knee. The limb was lying in hyperextension, and I engaged her attention by asking her questions, then handled the knee roughly and she said nothing about it. When I said there was nothing the matter with her she became very angry, and remarked, "If there is nothing the matter with me why should I wear this brace?" I told her to get up and walk, and after explaining the matter to some relatives who accompanied her, they also tried to persuade her to walk. After crying for half an hour she concluded under protest that she would try it. She got up and walked about the office in her stocking feet without any trouble whatever. There was a great jollification, and finally she went away leaving this brace with me. She has had no trouble since, and has become perfectly well. The knee was quite stiff from prolonged fixation, but in proof of the fact that fixation does not interfere with motion of the joint ultimately, she can now flex her knee joint at right angles. I heard from her no later than to-day, and she can walk nineteen squares without trouble.

This is one of the miracles that are performed by the osteopaths, the Christian healers, etc., in the case of an hysterical girl whose life has been ruined for seven years by a quack doctor.

Discussion. Dr. Louis Frank: I think there are probably a great many more such cases as Dr. Vance has reported than we see. I recollect a case which Dr. Vance saw with me; a young lady from Danville, Ky., who had kept her leg in a bandage for several years. It was supposed that her leg had been sprained, and she had worn not only a plaster bandage, but also had worn a rubber bandage for two or three years. She had used a cane, and believed she could not walk without it. As soon as the bandage was removed and she was instructed to use her limb, perfect motion was obtained, and she is well.

Dr. J. G. Cecil: I would like to ask Dr. Vance if this young woman wore the brace during the night, so that the knee was fixed all the time.

Dr. A. M. Vance: According to the history that I obtained, the brace was worn continuously, night and day.

Dr. L. S. McMurtry: How long was the patient under treatment, and was massage used or any thing else to develop the muscles of the limb which had remained in a state of inactivity for so long?

Dr. H. A. Cottell: The case shows that the days of faith cure are not over, as illustrated by Dr. Vance's success. As soon as the woman had sufficient faith in the surgeon, she was able to get up and walk at his bidding. I suppose the condition described developed in what might be called an ordinary hysterical woman. There are undoubtedly many such instances.

Dr. A. M. Vance: In answer to Dr. McMurtry, I simply directed this young woman to put a pillow under her knee at night, and whenever she sat down to have the limb rest across a chair, in order to get her to flex the leg and use it. She has walked every day, and is gradually increasing the exercise.

In the case I have reported I do not know whether there was any neurosis, so-called, of the joint primarily or not; I doubt if there was any disease of the joint, but what the condition was at the beginning of treatment in the South I am unable to say.

Solid Tumor of the Left Ovary. Dr. W. O. Roberts: Ten days ago a lady aged twenty-six years, married, was sent to me from a neighboring town. She has one child, two years and nine months old; it was a perfectly normal labor, and she had no trouble following it, so far as she knows. Four or five months after birth of the child she began complaining of a discharge from the vagina, pain, etc. She was under the care of a local doctor, who said she had "womb trouble." She was under his care several months, never regaining her normal health, but for the past year she has been suffering a great deal from constipation, indigestion, with considerable pain in her back and in her legs. Since Christmas she has been confined to her bed the greater part of the time. During this time she has had the most persistent constipation, and whenever this was particularly marked there would be distension of the abdomen, and her fecal evacuations, while solid, would come out in flattened pieces.

She had a hard tumor in the left side and behind the uterus, with a very much narrowed condition of the lumen of the rectum, and most obstinate constipation. Upon examination the night she arrived here I found her abdomen very much distended with gas, not sensitive to pressure, and along the descending colon and sigmoid flexure, and also the transverse colon, I could make out lumps which I took to be fecal matter. On examining the rectum I found its caliber very much narrowed, in fact, I could hardly get the end of my finger through as high up as I could reach, and she said her bowels had not acted for a week, but she had been passing considerable mucus from the rectum. On examination per vaginam I found quite a large, hard, nodulated mass situated to the left and behind the uterus. I thought from this examination that I had a malignant tumor of the upper part of the rectum or in the sigmoid flexure. I suggested that she be given an enema, and she said she had taken enemata every day for a week without any effect. Upon inquiring how much water she could hold, she said about half a glass. The next day I ordered that her bowel be washed out several times, and that she be given the enemata lying down—she had been in the habit of taking them sitting over a vessel. When I saw her the next day I found she had been able to do but little more lying down than she had in sitting. At this visit Drs. Anderson and Butler saw her with me. Her abdomen was very little changed from the condition it presented when I first saw her. We could still make out the hard masses in the colon. They discovered the growth to which I called attention. Dr. Anderson expressed the opinion that it was not malignant, but it was most likely a growth of the ovary, and that the bowel symptoms were due entirely to pressure of the growth.

The following day I gave her a large dose of castor oil, and it brought away several fecal concretions about as large as my thumb and flattened, and this relieved very markedly the distension of the abdomen. After her bowels were thoroughly emptied by the castor oil, I was able to get my finger up into the rectum without any difficulty; still there was considerable narrowing. I advised that an operation be done, and the day before yesterday, assisted by Drs. Anderson and Butler, I did a laparotomy and found a solid tumor of the left ovary, which was tightly adherent to the uterus and to the bowel, and the tube also adherent higher up at the upper part of the rectum. The right ovary was bound down by adhesions, and was also removed. While the adhesions were very strong in both sides, the patient lost very little

blood. This is the first case of solid tumor of the ovary that I have met with.

Discussion. Dr. L. S. McMurtry: Might not the right ovary and tube have been preserved, as the woman was but twenty-six years of age, and thus saved her the artificial menopause?

Dr. Turner Anderson: Dr. McMurtry perhaps overlooked one point in the description Dr. Roberts gave of this case. The right ovary was bound down and adherent to the uterus, almost to the bottom of Douglas' cul-de-sac, and the appendix was adherent to that. In separating the adhesions the meso-appendix was so injured that the appendix, in addition to the ovary, was removed.

Dr. W. O. Roberts: What Dr. Anderson has said should have been embodied in my original remarks. The right ovary was removed because it and the tube were injured in freeing it from the gut and appendix. The appendix was also removed.

Dr. Louis Frank: I take this to be a fibroid tumor of the ovary, arising, I suppose, from the medullary portion of the ovary itself. Also, in connection with this specimen, I will say that I think when possible one ovary should always be saved.

In this connection I desire to report the following case, in which the appendix was involved:

S. B., aged twenty-three, married; has two children, one aged eight and the other four years. She began menstruating at the age of thirteen, and has always been normal—without any pain other than an occasional headache. She has had one abortion, probably not criminal, since the birth of last child, from which she recovered perfectly, and which was accompanied by no bad symptoms. The childbirths have been normal, the only occurrence of note being that after the birth of the first child the lochia ceased on the third day, but became re-established a few days after. She was not compelled to remain in bed any longer than the usual time after this or the subsequent labor. There was no fever, so she states, after any of the deliveries. Several years ago she became infected from her husband, since which time she has had a profuse leucorrhœal discharge, which has been at all times more or less purulent in character. About three weeks ago, following coitus, she had considerable pain in the abdomen, which soon subsided. Ten days after this the vaginal discharge became much more profuse than it had been. She was attending to her usual duties, and

following her occupation without any discomfort, and complained of no pain. On Thursday evening, March 30, 1899, she began to have what she called the "stomach ache"—that is, general pain, not severe in character, throughout the lower part of the abdomen. At this time she was constipated. The pain became more severe, and on Saturday, April 1st, she was compelled to take to her bed. The pain had now become localized in the right iliac fossa, and was very acute; she had some fever, also nausea, but no vomiting; the bowels had not moved, nor had they when she was seen by the family physician on April 4th. She then had a temperature of 100° F., some pain throughout the lower abdomen, most marked on the right side, accompanied by nausea, restlessness, and coated tongue. The doctor who examined her states that there was no marked rigidity of the muscles on the right side. Some of the discharge, I believe, was taken and examined, and gonococci found. Salines were used, which produced free purgation, after which she felt considerably better. On April 5th, during the evening, about three hours before I saw her, she had been given one quarter grain of codeine. Upon examination I found temperature 99.5° F., pulse 100, countenance anxious, patient very restless, and suffering considerable pain. By abdominal palpation marked tenderness and pain could be elicited over the right iliac fossa, especially well marked at McBurney's point. There was some resistance on this side, no rigidity, but as compared with the left side the resistance was quite apparent. Upon vaginal examination the left side was found free, the uterus enlarged, but movable and very painful. There was some fullness and resistance upon the right side, which could not be thoroughly investigated on account of the pain. A diagnosis of pyosalpinx and recent appendicitis undergoing subsidence was made, and an operation advised.

April 6th. Examination under chloroform before operation. A distinct tumor mass was made out in the right ovarian region, connected with the uterus. No tumor could be found in the right iliac fossa. Being in doubt as to the positiveness of complicating appendicitis, the incision was made in the median line. The uterus was found quite movable, the left appendages normal, the right appendages the seat of pyosalpinx and those adhesions which are usual with the structures in these cases. At the point of junction of the ovarian and tubal adhesions the tip of the appendix was found glued down by some plastic exudate. The appendix being first freed, the tube and ovary were

separated, ligated, and removed. It was noted that the broad ligament was very tense, the uterus very large, and it was with great difficulty that either the diseased or normal appendages were brought out of the incision. After dropping the broad ligament pedicle the appendix was brought up and found enlarged at the distal end, with much congestion. After ligating the appendix with catgut, it was removed and the stump whipped over with gut. The appendix shows evidence of recent inflammation, and, upon dissection, is found filled with soft fecal matter. At its distal end the mucous membrane is swollen and injected, showing evidence of recent inflammatory action. The abdominal wall was closed with through-and-through sutures of silkworm gut. Duration of operation, forty minutes. Patient was put to bed with pulse of eighty; before the operation it was one hundred. The temperature at this time was normal, and has remained so since.

April 7th. Temperature normal; pulse ninety; patient suffering some pain; slept about six hours during the night subsequent to a hypodermic injection of one eighth grain of morphine.

April 24th. The patient was sent home at the end of twelve days, and is now perfectly well.

Dr. A. M. Vance: I have had two cases similar to the one reported by Dr. Frank. One was a young woman whom I thought had a pyosalpinx on the right side. I operated, making an incision in the median line, and found I was mistaken—that she was suffering with a walled-off appendicitis. I closed the median incision and then made the ordinary operation for appendicitis, removing a gangrenous appendix, and let out a large quantity of pus. The patient made a good recovery. In another case a diagnosis of both appendicitis and pyosalpinx was made. Operation was by median incision and both the conditions found, a gangrenous and perforated appendix with also a pyosalpinx. This patient also recovered. There is no question but it is oftentimes impossible to tell the difference between an appendicitis and pyosalpinx involving the right side in women.

Dr. L. S. McMurtry: The reports made by Drs. Roberts and Frank would furnish a very interesting theme for discussion, that is, the relation of appendicitis to inflammatory diseases of the uterine adnexa. In a large number of cases it will be found that appendicitis and salpingitis are associated, and it is the question now to tell which is the primary disease.

Dr. Louis Frank: In the case I reported the appendicitis was

merely a complicating condition and entirely independent of the disease in the tube and ovary, the case being so diagnosticated, and the conditions found at operation clearly proving this to be the case.

The essay of the evening, "Dislocation of the Cervical Vertebrae, followed by Mania and Death: Report of a Case," was read by Thomas L. Butler, M. D. [See p. 329.]

Discussion. Dr. A. M. Vance: I have seen several broken necks and injuries about the neck in my experience. I have operated upon but one, an old man who was paralyzed, both sensation and motion, from his neck downward. He was removed to his home, and for eight days lay there without pain or suffering, perfectly paralyzed both as to motion and sensation. At the end of eight days he allowed me to operate upon him. When I cut down over the cervical region I found a fracture of the fourth cervical vertebra, exposing the dura over quite an area. Upon lifting up this broken bone, he being perfectly conscious, he remarked that he believed he could move his foot and arm, which he proceeded to do then and there. I scraped the dura and pressed upon it first one side then the other, and he said he could feel sensation upon the side opposite to where my manipulations were made. He lived fourteen days afterward, the wound healing perfectly, and he improved progressively as to motion. He could empty his bladder normally, and also had control of the bowel. He died of hypostatic pneumonia, being a man sixty-five years of age.

These cases are very unpromising ones to operate upon. In my case there was no suppuration. I think Dr. Butler's patient died either from hemorrhages or from a septic condition from the wound.

Dr. Louis Frank: In regard to the flushing of the face mentioned by Dr. Butler: I would like for some of the physiologists or Dr. Butler to make plain the cause of this. Was it not due to paralysis of the cervical sympathetic? I remember a case seen several years ago where there was paralysis of the cervical sympathetic, in which this was a marked symptom.

Dr. H. A. Cottell: It seems to me that the explanation offered by Doctor Frank is the correct one. The anatomical features of the case reported are extremely interesting. I hardly see how any displacement could occur between the axis and the atlas without serious injury to the cord. The case is very remarkable in this respect. We know

in nearly all cases of real or supposed dislocation of the vertebræ, even when the vertebræ show no sign of dislocation, that the bones have slipped out of place and then slipped in again, at the time, however, seriously lacerating the cord.

Dr. S. G. Dabney: The pupillary symptoms would rather indicate an irritation of the sympathetic. An inequality of the pupils, so long as response to light and convergence is perfect, is not very unusual in health.

Dr. T. S. Bullock: I can not understand the symptoms which occurred in this case, but I can testify to the great difficulty which was experienced in placing the ligature, and there was certainly some separation of the vertebræ. Dr. Roberts, who was assisting Dr. Butler, had to go away before the operation was completed, and I was the assistant from this time on. It was an extremely difficult matter to get the ligature properly placed.

I also coincide with the opinion expressed by Dr. Frank that the cervical sympathetic must have been injured.

Dr. W. O. Roberts: I, like the other gentlemen, can not understand why, with this dislocation, paralysis should have been confined to one arm and one leg. I felt satisfied at the time that there must be some intra-cranial injury. I have only met with two other cases of dislocation of the cervical vertebræ, and in both of these there was paralysis below, both arms and both legs, and both patients died of hypostatic pneumonia weeks after the accident occurred.

The dislocation in the case reported was easily recognized with the finger in the mouth pressed against the vertebræ before the operation, and we did not make out any fracture.

Dr. T. L. Butler: I do not agree with Dr. Vance that this man died of sepsis. There was free drainage, and the wound was carefully dressed every day, so there was no pent-up pus. The man's temperature remained practically normal for the greater part of the time for nearly six weeks after the operation. I really think the man died from exhaustion. To what the mania was due I do not know, unless there was some meningeal trouble; possibly alcohol acted as a predisposing cause.

In regard to the symptoms: The most interesting symptom was that he had paralysis of one leg and incomplete paralysis of one arm. Naturally it would be supposed that there would be complete paralysis from the point of injury down.

Since seeing this case I have read a report of a case quite similar to this by some English surgeon, in which there was a fracture in about the same location. No operation was done, and the man lived for eleven years with considerable deformity. He had paralysis of the right arm and right leg, just as occurred in my case. The diagnosis was verified eleven years after the injury by a post-mortem examination.

LOUIS FRANK, M. D., *Secretary.*

Foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

New School of Medicine; The Army Medical Report; The Use of Tuberculine; Effects of the New Vaccination Act; Adrenal Disease in Lunacy; Biliary Calculi in Children; The Anti-vaccination League; Centenary of the Royal College of Surgeons.

Lord Lister has opened the Henry Thompson Ward set apart at the Royal Southern Hospital, Liverpool, in connection with the school for the special treatment of tropical diseases. Lord Lister said he felt sure that Liverpool was doing work of the greatest importance for the welfare of mankind.

In the Army Medical Report for 1897, recently issued, it is stated that enteric fever caused 2,050 admissions to hospital among the European troops serving in India, 556 deaths, and a constant sickness of 296.85 men, being in the ratios of 31.8, 8.62, and 4.60 per thousand. Cholera caused one hundred and sixteen admissions and eighty deaths; at one station there were sixty-five cases and forty deaths during seven days, and it is noted that most of the sufferers were members of the Army Temperance Association, and the cholera microbe was detected in several articles of food and drink found in the room used by this Association on the morning after the outbreak. Examination failed to detect the poison in the drinking-water of the station.

The Medical Officer for Sunderland has just read a paper upon the Use of Tuberculin before the members of the Newcastle Farmers' Club: Dr. Scarfield suggested that mere inspection of cows by a veterinary surgeon was not of much use, as an animal might be seriously affected by tubercle and give no outward sign, and that the services of the veterinary surgeon and the tuberculin should be offered free of charge to any breeder or farmer who would agree to isolate the sound from the reacting animals. It was

also suggested that five years after the introduction of a new law on the subject no compensation for condemned carcasses is to be given, no milk from a tuberculous cow is to be sold, local authorities may test any animal, and if reacting may be sold and fattened for killing without compensation, and all cattle are to be sold with an implied warranty that they are free from tuberculosis.

In the course of a lecture delivered at St. George's Hospital it was stated that the lecturer knew of two cases in which the mind had effect upon disease; in each the increased growth of a humor appeared to follow the continued concentration of the patient's attention upon the part, and further that it has occasionally happened that a physician or surgeon who has paid particular attention to the diseases of some organ or region of the body has ultimately, as a result, it is assumed, suffered from an affection of the same part.

The President of the Local Government Board has stated that the effects of the new vaccination act have proved the opposite of those anticipated, vaccination being considerably on the increase, and the step taken by the Government in creating the "conscientious objector" more than justified. In a number of cases the actual statistics recorded show the increase in the number of certificates of successful vaccination to range from an increase from twenty-five to one hundred per cent. The increase is attributed to the system of domiciliary vaccination and the provision of a better and purer kind of lymph, which has relieved the apprehensions of a great many people who were formerly opposed to vaccination.

Dr. Beadles has drawn attention to four cases of extensive hemorrhage into one or both adrenals which have appeared in the necropsy records of Colney Hatch Asylum. He found that these organs were not uncommonly the seats of atrophy or inflammatory processes in the insane. These changes were, however, unaccompanied by symptoms. Addison's disease was rare among the insane, as also was malignant disease of the adrenals.

At the meeting of the Pathological Society Dr. Still gave details of three cases which he had seen within six months at the Great Ormond Street Hospital for Children of instances of biliary calculi in children. The first was the case of a child, aged nine months, that had suffered from vomiting, clay-colored stools, but with neither jaundice nor colic. At the post-mortem examination there were found eleven small, black, friable calculi of pigment, three being impacted in the common bile duct. Another patient was a female child, aged eight months; in this case also there was neither jaundice nor abdominal pain; the patient died of tuberculous meningitis. Three minute calculi of pigment were discovered in the gall-bladder. The last case, a boy, had vomiting with abdominal pain, but no jaundice; several calculi were discovered. Dr. Still remarked upon the rarity of such cases, but said he had been able to discover twenty published cases, of which ten were quite infants. He considered that biliary calculi might be formed during intra-uterine life, the viscosity of the bile in infancy, which led to a

secondary stagnation, probably giving rise to the formation of such concretions.

Upon the occasion of Dr. Sophia Jex-Blake retiring from active practice of her profession a farewell reception was given her in Edinburgh. Professor Masson remarked that not many years ago the people of Scotland thought the foundation of society would be shaken if women began to study medicine, and now, while free dispensaries stood open on all sides, many working women were willing to pay a relatively considerable sum in order to be attended by doctors of their own sex.

The Anti-Vaccination League at the annual meeting announced that they intend to establish a "Woman's Anti-Vaccination League." It appeared that the income of between £800 and £900 per annum is not sufficient, and it was decided to raise a special fund of £5,000 for the purpose of carrying on the campaign against vaccination and to increase the number of their paid lecturers.

It has been decided to celebrate the centenary of the charter of the Royal College of Surgeons of England next year before the termination of the college year on June 30, 1900. The charter of incorporation is dated March 22, 1800. The committee, however, consider that, although the actual day of the year on which the charter was granted would be the most suitable date for the function, March is not a desirable month.

Dr. Parker, of Liverpool, has recently successfully performed pyloroplasty on a man aged twenty-one years. The pylorus was found narrowed to three eighths of an inch in diameter outside. Upon opening this a small circular ulcer was discovered inside the stomach. Upon performing the operation over a Mayo Robson's decalcified bone button the diameter of the pylorus increased to one and a half inches outside. At the end of five weeks the patient ate ordinary meat diet and quickly regained good health.

LONDON, April, 1899.

Reviews and Bibliography.

Maisch's Materia Medica—New (7th) Edition. A Manual of Organic Materia Medica: Being a Guide to Materia Medica of the Vegetable and Animal Kingdoms. For the Use of Students, Druggists, Pharmacists, and Physicians. By JOHN M. MAISCH, Phar. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. New (7th) edition, thoroughly revised by H. C. C. MAISCH, Ph. G., Ph. D., Professor of Materia Medica and Botany in the Medico-Chirurgical College of Philadelphia, Department of Pharmacy. In one very handsome 12mo volume of 512 pages, with 285 engravings. Cloth, \$2.50, net. Lea Brothers & Co., publishers, Philadelphia and New York.

The name of Maisch in the department of materia medica carries with it a special force among physicians from the fact that the author of this work was for so long a time associated in the production of authoritative works on materia medica.

It need not be said that the very best to be obtained was afforded in the previous editions of this work as they successively came from the press. In this edition the son has taken up the work and added to it such facts of value as have transpired since the father laid down his pen, and he has done it in such a way as to satisfy the high expectations the profession had a right to indulge on account of the reputation of the father. The press-work is not the least of the book's attractions, the illustrations being especially artistic.

D. T. S.

Retinoscopy (or Shadow Test) in the Determination of Refraction at One Meter Distance with the Plane Mirror. By JAMES THORINGTON, M. D., Adjunct Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc. Third edition, revised and enlarged. Forty-three illustrations, twelve of which are colored. 86 pp. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

Retinoscopy is defined by the author as the method of estimating the refraction of the eye by reflecting into it rays of light from a plane or concave mirror and observing the movement which the retinal illumination makes by rotating the mirror, a definition that we hardly think will be adopted into the next edition of Webster's International without shaping it into meaning. The author's statement of an axiom on page 21 is another illustration that his training has been rather in the medical clinic than in the preparation of dictionaries. His axiom is, "That with an eye otherwise normal except for its refractive error, and being under the influence of a reliable cycloplegic, there is no more accurate objective method of obtaining its exact correction than by retinoscopy." This may be a fact, and may possibly come to be an aphorism, but an axiom it certainly is not, at all events not in Philadelphia. Upon the technical merits of the work we will not venture to pass. The fact that it has gone to the third edition argues a not unfavorable reception.

D. T. S.

The Principles of Bacteriology. A Practical Manual for Students and Physicians. By A. C. ABBOTT, M. D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania, Philadelphia. New (5th) edition, enlarged and thoroughly revised. Handsome 12mo, 585 pages; 109 illustrations, of which 26 are colored. Cloth, \$2.75, net. Philadelphia and New York: Lea Brothers & Co.

In previous reviews of this work we pointed out as one of its distinguishing merits its clearness and impressiveness of description. The author seems to write as if asking himself at the end of every sentence, "Have I made myself understood?" In a field where there are so many contestants for public favor this is not a small merit. Anybody can get enough facts together now to make a large book on bacteriology, and methods of staining and illustration are common property. What we all want is the man who selects the most profitable information and offers it in such language and style as make the study a pleasure and a pastime rather than a labor.

A call for a fifth edition of this work is its sufficient commendation, which is enhanced by the fact that this even is a great improvement over former ones.

D. T. S.

The International Medical Annual and Practitioner's Index. A work of reference for medical practitioners. Contributors: Prof. A. H. Carter, M. A., F. R. C. P.; Prof. H. A. Chapen, M. A., M. D.; C. W. Daniels, M. B., M. R. C. S.; E. Harry Fenwick, F. R. C. S.; W. Soltan Fenwick, M. D., M. R. C. P.; T. Colcott Fox, B. A., F. R. C. P.; H. Bellamy Gardner, M. R. C. S., L. R. C. P.; A. E. Giles, B. Sc., M. D., F. R. C. S.; J. Dundas Grant, M. A., M. D.; F. de Haviland Hall, M. D., F. R. C. P.; Prof. G. M. Hammond, A. M., M. D.; David Hardie, M. D.; Robert Jones, F. R. C. S.; Prof. Charles Boyd Kelsey, M. D.; Richard Lake, F. R. C. S.; Priestly Leech, M. D., F. R. C. S.; Keith W. Monsarrat, F. R. C. S.; Prof. W. Oliver Moore, M. D.; Wm. Murrell, M. D., F. R. C. P.; Stephen Paget, M. A., F. R. C. S.; Prof. Seneca D. Powell, M. D.; James Priestly, B. A., M. D., D. P. H.; Wm. A. Purrington, A. B., LL. M.; Prof. A. W. Mayo Robson, F. R. C. S.; A. D. Rockwell, A. M., M. D.; Prof. Robert Saundby, M. D., F. R. C. P.; Samuel G. Shattock, F. R. C. S.; Prof. W. Gilman Thompson, M. D.; Wm. Thorburn, B. Sc., F. R. C. S.; A. H. Tubby, M. S., M. B.; R. Norris Wolfenden, B. A., M. D.; Eugene S. Gouge, M. D., C. M. 1899. Seventeenth year. 700 pp. Price, \$3.00, net. E. B. Treat & Co., New York.

A large amount of practical work is indicated for the year by the contributions in this volume, in almost every department of medicine and surgery. The list of authors here given, many of them known wherever medicine is known as leaders in medical authorship, is of itself a guarantee of the high excellence of the work, without invoking the flattering history of the years through which it has continued. There is no waste to it; it is all meat and marrow, while the range is as wide as medicine and surgery.

GERRISH's forthcoming *Anatomy by American Authors* promises to be the work for which teachers and students have long been looking. Its editor, Prof. F. H. Gerrish, of Portland, has selected as his fellow-contributors leading anatomists throughout the country, wisely restricting their number to accord with the best division of the subject, gaining thereby unity in result, joined with the highest authority. The list includes Professors Bevan of Rush in Chicago, Keiller of the University of Texas, McMurrich of the University of Michigan, Stewart of the University-Bellevue College in New York, Woolsey of Cornell Medical College likewise in New York, and Gerrish himself, who is not only editor, but perhaps the largest contributor.

The plan of the work judiciously avoids the unimportant and exceptional, reserving its space for those portions of anatomical knowledge which are necessary to the intelligent study of physiology, surgery, and internal medicine. The authors have endeavored to stand in the place of a living teacher to the student, selecting such portions as will be of actual service to the pupil in his study and to the practitioner in his subsequent clinical work, clarifying obscurities, giving most help in the most difficult parts, and illustrating every thing by all available methods. Pictorially Gerrish's

Anatomy will be by far the most lavish work ever offered on a subject which can already boast of many elaborately illustrated text-books. The engravings number about one thousand, their size is large enough to make visible every detail, colors have been employed more liberally than ever before, and lastly the labels of the parts have been conspicuously engraved upon them, whereby a glance gives not only their names but also their position, extent, and relations, obviating entirely the slow, toilsome, and wasteful mental processes necessitated where only reference letters are employed. In an early issue we shall give our readers a review of the book itself.

Abstracts and Selections.

REPORT OF SEVENTY-EIGHT CASES OF PULMONARY TUBERCULOSIS TREATED WITH WATERY EXTRACT OF TUBERCLE BACILLI.—A report of seventy-eight cases of pulmonary tuberculosis treated at the Winyah Sanitarium, at Asheville, N. C., in 1898, with watery extract of tubercle bacilli, by Dr. Karl von Ruck, appears in the February number of the *Therapeutic Gazette*.

The author giving due credit to the advantages of the favorable climate of the Asheville plateau as well as to the systematic employment of hygienic and dietetic methods, in a special institution, shows nevertheless by his results the unmistakable favorable influence of this preparation, which he perfected in his laboratory in February, 1896.

He with many others, notably Professor Koch, have long realized that the bodies of tubercle bacilli contain a soluble substance, a proteid upon which the curative action of all tuberculin preparations and modifications must depend, small and variable quantities of which were thought to enter into the culture fluid from which the tuberculin preparations are made.

Experiments upon animals have shown that the injection of dead tubercle bacilli produces both curative and immunizing effects, but they have always produced abscesses at the point where they were injected and often spurious tubercle in the animals experimented upon, conditions which seemed to preclude their use in the treatment of human tuberculosis.

A solution of the tubercle bacilli without injury to the curative proteids was therefore naturally sought for, and in April, 1897, Professor Koch announced that he had accomplished this in the production of Tuberculin R., which was then given to the profession.

Several weeks later Dr. von Ruck announced his success in also making the desired solution, and communicated his experiments and methods in a paper read before the American Climatological Association and

published in its transactions for 1897, and also in the *Therapeutic Gazette* for June, 1897. His method of preparation differs from that published by Professor Koch, and is briefly as follows :

The tubercle bacilli are filtered out of the rapidly growing and highly virulent culture. After washing with distilled water for the removal of the remains of the culture fluid, they are dried in a vacuum desiccator. Next they are powdered in an agate mortar and then extracted with sulphuric ether. This extraction removes the fats. They are again dried and powdered as before, and their further extraction takes place in sterilized distilled water over a water bath with a temperature of 120° F. The proteids becoming dissolved in the distilled water, the fluid is then decanted and filtered through porcelain, when finally the amount of proteids is determined and the preparation standardized to a certain per cent.

Prof. Koch simply triturated his tubercle bacilli and then put them into distilled water and separated the undissolved germs with a centrifugal machine. His preparation, however, did not pass through a porcelain filter, and it was subsequently shown that when an attempt of filtering through porcelain was made, a residue collected in the filter consisting of tubercle bacilli.

Virulent infection followed the injection of this residue in animals, and for this reason Professor Koch was obliged to withdraw his Tuberculin R., it being an emulsion of tubercle bacilli and fragments of such, rather than a true solution.

Koch's claim that in a true solution of the tubercle bacilli the final perfection of a specific remedy was attained, would appear to be verified by the results which Dr. von Ruck reports.

He treated with his watery extract twenty cases in the early stages, all of which recovered, with an average gain of eleven pounds in weight, and subsidence of all symptoms.

Of thirty-seven cases in a more advanced stage, twenty-seven recovered, seven were greatly improved, three improved, and none grew worse, gaining on an average nearly thirteen pounds each.

Twenty-one cases in a seriously advanced stage were also treated, of which three recovered, nine were greatly improved, seven were improved, only two grew worse or died, there being an average gain in weight of ten and a half pounds each.

The remedy was also given for trial to Dr. Denison, of Denver, Dr. Taylor, of St. Paul, and Dr. Williams, of Asheville, all of whom obtained good results. Dr. Williams, supplying the date of twelve cases treated by him with von Ruck's extract, shows seven early stage cases, all of which recovered ; of three cases in the second stage, one recovered, and two were greatly improved, and of two far advanced cases, one recovered and one grew worse.

Comparing his previous results with those obtained with the watery extract in von Ruck's institution, he shows the results as follows :

	Cases.	Recovered. Per Cent.	Improved. Per Cent.
Treated without specific remedies, ...	816	12.1	31.0
Treated with Koch's original tuberculin, . .	379	35.5	37.5
Treated with antiphthisin and tuberculocidin, ...	182	32.5	46.8
Treated with tuberculinum purificatum (von Ruck), ...	166	43.4	39.2
Treated with watery extract of tubercle bacilli (von Ruck), ...	78	64.1	33.3

Among other matters of interest, the report also contains mention of Dr. von Ruck's efforts to produce a serum, as suggested by Professor Koch in his paper, by using Tuberculin R. and his watery extract for immunization. Dr. von Ruck used goats for this purpose, and injected them in increasing doses reaching 70 c. c. per single dose in the course of six months.

Serum taken from these animals failed to protect or cure guinea pigs, and finding his results entirely of variance with the claims of Dr. Fisch, he purchased serum from Dr. Fisch's laboratory and treated a number of guinea pigs, all with negative results.

These experiments are given in detail, and it does not appear that the degree of tuberculosis or its course was in any way modified by the injection of this serum; the control animals showing no greater progress in the disease than did those which were treated.

Full directions are given for the use of the watery extract, the beginning dose being 1-1000 of a milligram, and this is gradually increased to five milligrams. There are three solutions, No. 1 containing 1-100 of one per cent, No. 2 1-10 of one per cent, and No. 100, containing one per cent of the anhydrous extracts.

HYSTRIA SIMULATING INTESTINAL OBSTRUCTION.—Strauss (*Berl. klin. Woch.*, September 19 1898) records the case of a man, aged twenty-nine, who during the last eight years had been treated for abdominal troubles at various hospitals in Germany. The patient had suffered from obstinate constipation, distension of the abdomen, and vomiting, sometimes of a feculent character. The symptoms so closely resembled those of intestinal obstruction that on two occasions a laparotomy was performed. The patient's condition was temporarily improved after each operation, though nothing to account for the abdominal symptoms could be discovered. In January, 1898, the patient was brought to Professor Senator's clinic with symptoms resembling those of intestinal obstruction, but on this occasion no laparotomy was performed. The treatment was by lavage of the stomach, high enemata and purgatives, and action of the bowels was obtained. He continued, however, to suffer from constipation, pains, and distension of the abdomen, occasional anorexia, and recurrent attacks of vomiting (never the fecal vomiting). The quantity of urine passed during the day was above the average, but sometimes there were periods of retention of urine lasting more than twenty-four hours, during which the urinary

bladder reached nearly up to the umbilicus. Other symptoms mentioned include left-sided migraine, singultus, dyspnea, paroxysms of sweating (especially on the left side of the body), and "astasia-abasia." On May 18, 1898, a sudden change occurred; a typical hysterical fit was followed by nearly complete disappearance of the abdominal symptoms, and by return of the power of walking. Strauss relates also the case of a man, aged fifty, who died with symptoms resembling those of cancer of the esophagus. A bougie could not be made to pass the cardiac orifice of the stomach, and all food taken by the mouth was returned, as if insuperable obstruction existed in the cardiac part of the esophagus. At the necropsy, however, nothing to account for the obstruction could be found, but a chronic hydrocephalus internus was present. A boy, aged sixteen, suffering from valvular disease of the heart (mitral reflux) suddenly developed paraplegia and the signs of embolism of the lumbar spinal cord. For several days about half a litre daily of a thin mucous fluid escaped from the paralyzed anus, evidently a kind of neuro-paralytic secretion from the mucous membrane of the bowel. Such cases demonstrate that it is possible for grave disturbances of the alimentary canal to have a purely nervous origin.—*British Medical Journal*.

APPENDICITIS OR EPITYPHILITIS?—Kuster (*Centralbl. f. Chir.*, No. 50, 1898) protests against the use of the term "appendicitis," which he regards as most unsatisfactory both in meaning and form. German anatomists do not use the term "appendix" in describing the vermiform process of the cecum, and are unwilling to adopt a term which in its multiple sense is already generally applied to the small fatty processes met with on the large intestine. The form of the term "appendicitis" is held to be particularly objectionable, as it consists of a Latin word with a Greek ending. Such a term, Kuster holds, would be hardly tolerable even if it could not be replaced by another. It is not difficult, however, he states, to find a good substitute. The Greek anatomist, whose definitions were made chiefly on animals which, with some few exceptions, do not possess a vermiform process, left no term for this structure, but it would have been in accordance with the spirit of the Greek language to have given it the name of "epityphlon" as indicating a something attached to the outer surface of the cecum. On these grounds Kuster would advocate the substitution of the term "epityphlitis" for that of appendicitis. The former term, which he has long used in his clinical lectures, will, he anticipates, be preferred by those acquainted with Greek to the older and more frequently used term.—*Ibid*.

DIPHThERIA AND CORYZA.—Grenet and Leone (*Arch. de Méd. des Enfants*, August, 1898) report on a series of experiments conducted by them to ascertain the connection of various cases of purulent coryza, unaccompanied by false membrane, with true diphtheria. The greater number of cases were in children under a year old attacked, only as far as

could be ascertained, by coryza, but some of them manifesting other signs, for example, of hereditary syphilis, gastro-enteritis, or convalescence from measles. They found in a large number of cases a very small bacillus smaller than the short diphtheria bacillus, and often curved in form. It was found to grow longer when cultivated in suitable media, but never attained the dimensions of the large diphtheria bacillus. Inoculated into the rabbit, the bacillus proved fatal eight times out of sixteen cases in a period varying from thirty-six to sixty hours. Inoculation experiments enabled the authors to distinguish between two varieties of bacilli found in the nasal cavities: (1) A bacillus of which either the pure culture of the toxin proved fatal, giving rise in the animals inoculated to lesions entirely analogous to those produced by the classic variety of the diphtheria bacillus. (2) A bacillus very difficult to distinguish from the first variety, having the same essential form and character, but which was not fatal to the animals inoculated. The two varieties were met with at times in the same subject. It is, therefore, possible to find in the nasal cavities of children suffering from a coryza of apparently benign character a bacillus presenting all the characteristics of the diphtheria bacillus, and in some cases of great virulence. The existence of this bacillus explains the appearance of diphtheria in children who have not been in contact with any known source of contagion, and justifies the bacteriological examination of all cases of chronic purulent catarrh in hospitals.—*Ibid.*

DISTURBED COMPENSATION IN VALVULAR DISEASE.—Balint (*Deut. med. Woch.*, January 6 and 13, 1898) has made an experimental study in this subject. He first refers to the views current at the present time. The author produced aortic incompetence in dogs, cats, and rabbits by Rosenbach's method, but later he employed a hooked sound, by which he could not only pull back a valve, but also tear it off. The animal was under observation until its death, and then the condition of the heart muscle was carefully examined. Hypertrophy of the heart was always induced, and tables are appended showing the exact results. The experiments on dogs went to show that there was no disturbance of compensation after the destruction of one or two aortic valves within the period of observation, the maximum time being 293 days. In order to examine Krehl's view, which makes the disturbance of compensation dependent upon extension of the inflammatory process from the endocardium to the cardiac muscle, the author injected phosphorus oil after destroying the valves. The heart muscle underwent fatty degeneration, but there was no loss of compensation. Thus the fatty change in the myocardium did not produce loss of compensation. These experiments accord with Strümpell and Fraentzel's view that fatty degeneration is the result and not the cause of loss of compensation. The author then made a number of experiments, in which he divided one or both vagi after destroying the valves. He found that after destruction of the aortic valves and section of one vagus in dogs and cats, a

loss of compensation resulted after a given time, and this occurred even when the section of the nerve was made long after the valves were damaged. In rabbits no such effects were produced, and the cause of death was not obvious. In spite of very careful examination no change was found in the myocardium in these cases. Thus in the disturbance of compensation the nervous mechanism of the heart plays a very important part, but its exact mode of action is difficult to explain. Control experiments were always made by the author. He admits that the animals may possibly not have been kept alive long enough in the earlier experiments, and that perhaps disturbance of compensation might have appeared later. These results can not be applied without further consideration to the case of man, but it is not improbable that the cause of disturbed compensation does not lie so much in the changes in the cardiac muscle as in those in the nerves.—*Ibid.*

BOLOGNINI'S SYMPTOM IN MEASLES.—A. Köppen (*Centralbl. f. inn. Med.*, July 2, 1898) draws attention to Bolognini's observation in measles, that when both hands are placed on the abdomen with the fingers directed downward, and an alternating and gradually increasing pressure is exercised, a slight rub can be felt as if two uneven surfaces were moving over each other. This was noticed early by Bolognini in 198 out of 200 cases of measles, where there were no signs of peritoneal irritation. Bolognini attributes it to a fleeting peritoneal exanthem. In 316 cases of measles in which 343 examinations were made, Köppen found this sign present 154 times. He compares the sensation, however, to the crackling felt in subcutaneous emphysema. It could be obtained only when the small intestine was manipulated between the hands. The author has never found it present in healthy children, and but rarely in those suffering from intestinal affections. He concludes that the symptom is very frequent in measles, but that it is not pathognomonic, and that it arises from alteration in the intestinal contents.—*Ibid.*

THE OPERATIVE TREATMENT OF NON-MALIGNANT STENOSIS OF THE PYLORUS.—Henle (*Centralbl. f. Chir.*, November 29, 1898) discusses the question whether pyloroplasty or gastro-enterostomy be the better operative method to adopt in cases of non-malignant constriction of the pylorus. The results obtained from the former method in the practice of Mikulicz have convinced him that this is quite as successful with regard to the restoration of function as gastro-intestinal anastomosis; and, moreover, in pyloroplasty, it is pointed out, the natural conditions of the affected parts are maintained. The occasional failure of this operation is attributed by the author to a faulty technique, or to errors in the selection of suitable cases. An instructive case is here recorded in which on operating for the relief of frequent vomiting, gastric pain, and other symptoms of pyloric obstruction, Mikulicz not only departed from his usual practice of performing pyloroplasty, but also modified to some extent the ordinary method of

gastro-enterostomy. The obstruction was found to be due not to stricture, but to displacement of the pylorus, caused by the retraction of firm bands of adhesion between the pyloric end of the stomach and the duodenum on the one hand, and the colon and the liver on the other. The pylorus had been drawn upwards, dragging with it the end of the stomach and the first portion of the duodenum, which were placed side by side, each taking a vertical direction. As the pylorus could not be readily reached it was decided to establish an anastomosis between the dilated stomach and the small intestine. The ordinary practice of taking up a loop of jejunum was not adopted, but the displaced and contiguous portions of stomach and duodenum were opened and stitched together. The patient, it is stated, made a good and complete recovery.—*Ibid.*

OPERATIVE TREATMENT OF PERICARDIAL EFFUSION.—Brentano^{*} of Körte's Clinic (*Deut. med. Woch.*, August 11, 1898) draws attention to the three methods of treatment: (1) by tapping, (2) by incision, and (3) by incision after the resection of a portion of rib. With regard to the first named, a safe place has not yet been found where the puncture can be made without danger to the heart itself or pleura. The author maintains that when the pericardial sac is full of fluid the heart remains near the anterior surface. The pleural effusion, which has occasionally followed puncture, has been most probably due to a wound of the pleura. A further disadvantage is that the pericardial sac can never be completely emptied in this way, and the puncture has to be repeated. The author thinks that simple incision should also be discarded. Both the mammary vessels and the pleura are in danger of being wounded. Partial pericardial adhesions may also be present. The opening of the pericardial sac after resection of a portion of rib is so simple that it can be done without general anesthesia. It is most convenient to resect the fifteenth left costal cartilage. Brentano divides the cartilage through its center, and then removes the two halves. A puncture is made to ascertain the character of the effusion, and the pericardium then carefully incised. It is well to attach the margins of the pericardial incision to those of the skin. After evacuating a purulent effusion, washing out with sterile water should be practiced. The removal of coagula and fibrin masses is very important. In case of a purulent effusion the author has seen no disadvantage in the daily washing out with sterile water or weak lysol solution. By the method of incision after rib resection the pericardium may be directly treated, and the adhesions will be less than when the remains of the exudation are left. The author cautions against operating on cases in which there has been long-continued cardiac disturbance. In five cases treated in Körte's clinic marked improvement always occurred, but only one case recovered. In two cases there was a suppurative pericarditis due to infective osteomyelitis. In two others the pericardial effusion was sero-fibrinous. The cases were of long standing, and the author adds that it might possibly have been better if they had not been

operated upon. The fifth case, which recovered, occurred in a girl, aged ten, with a large and threatening effusion of rheumatic origin.—*Ibid.*

APPENDICITIS DURING PREGNANCY.—Bouillier (*Thèse de Lyon*, 1897) discusses this subject on a basis of 22 observations, considering (1) the influence of pregnancy on appendicitis, (2) the influence of appendicitis on pregnancy. As to the first point he concludes that pregnancy plays no part as an etiological factor in the causation of appendicitis. The pregnant woman is not more subject to this form of inflammation than the non-pregnant. The influence of appendicitis on pregnancy is, on the other hand, well marked. In 7 out of the 22 cases abortion at about the fourth month resulted, either before or after surgical treatment. Spontaneous abortion may be due either to the febrile condition and the affection of the general health, or to infection of the pelvic organs from the appendix; possibly to both factors. The mortality in the 22 cases was: Maternal, 30.4 per cent; fetal, 47.8 per cent; consequently pregnancy renders the prognosis of appendicitis more serious. The treatment is that of appendicitis, the pregnancy not constituting a contraindication. Early intervention is desirable, since, if the case be left, there is grave danger of puerperal complications due to general infection or to direct infection of the pelvic organs.—*Ibid.*

STYPTICIN IN UTERINE HEMORRHAGE.—Braitenberg (*Wien. Med. Presse*, 1898, No. 35) tabulates twenty-four cases of metrorrhagia treated with stypticin in the Innsbruck Gynecological Clinic. Stypticin is hydrochloride of cotarnin, the base of the opium-alkaloid narcotin; it is a yellow, inodorous, bitter powder, and is usually given in $\frac{3}{4}$ gr. doses five to eight times a day. In severe cases 3 gr., or even more, can be safely administered. When taken by the mouth eructations are apt to follow, so that intramuscular injections of a 10-per-cent solution into the nates are to be preferred. In the twenty-four cases referred to a negative result is recorded in one case only, and an almost negative in another; there were no ill-effects. The sedative action recorded by previous authors was not evident, as when pain was present it rarely yielded at the same time as the hemorrhage. In accordance with previous observations, least result was obtained in uncomplicated hemorrhagic endometritis; when, however, the stypticin was used for bleeding which had returned after curretting, its action was much more marked. When the hemorrhage arose from malposition of the uterus, from peri- or parametritis, or from inflammation of the appendages, stypticin checked it most signally. In menorrhagia and dysmenorrhea the results were equally good, as also in hemorrhage without obvious anatomical cause. In a case of fibroids, however, no good was done. Only one case of hemorrhage in pregnancy was treated; this was one of threatened abortion from retroflexion. Seven doses of $\frac{3}{4}$ gr. stopped the hemorrhage and averted the abortion. None of the patients were confined to bed during the treatment unless their diseases actually required it.—*Ibid.*

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KENTUCKY STATE MEDICAL SOCIETY.

On the 17th instant, at 11 A. M., our doors of welcome will be thrown wide open and the freedom of the city given to our guests of the Kentucky State Medical Society.

From "Dewey Day" onward our city is to hold among American cities the place of honor: The races, Sam Jones, Buffalo Bill, the Musical Festival, the Southern Baptist Theological Association, the Travelers' Protective Association, and the Journeymen Horseshoers of America are to partake of her hospitality, which she will dispense freely to all, but the first seat at her table, and the warmest place in her heart, she reserves for her best friend, the medical guild of the State.

The untiring Committee of Arrangements have left nothing undone which can contribute to the comfort of the visiting Fellows, while the programme presents scientific pabulum enough for a national association at work in sections. If President Barrow succeeds in getting this programme delivered in the time appointed, he will win the banner place among presiding officers.

For more reasons than one the 1899 meeting bids fair to be memorable in the annals of Kentucky medicine, for not only will the papers and addresses be of more than standard merit, but certain ways and means for materially enlarging the membership of the Society and enhancing its influence will be introduced, discussed, and, we believe,

adopted. A very large attendance is therefore desired by all who have the good of the Society and the honor of Kentucky medicine at heart.

In flowery May, "when brooks send up a merry tune and woods a joyful sound," when the air is neither too warm nor too cool, when the garden is planted, the spring chickens and soft-shelled crabs are ripe, and when practice is at zero is the time for the country doctor to leave home.

Come and welcome; "our oxen and our fatlings are killed." Come to the feast, and you shall see the marriage of science with good cheer.

Notes and Queries.

DR. SMITH'S NEW BOOK.—The comments of reviewers on Dr. Smith's new book, "The Philosophy of Memory, and Other Essays," now coming in in large numbers, are quite complimentary to the work, and presage for it a cordial reception by the reading public. Below we give a few extracts from the many favorable press notices that have been received:

From the Bookseller, Chicago: "The Philosophy of Memory, and Other Essays," by D. T. Smith, M. D., is a book that will interest every student and thinker.

Omaha Bee: The writer is undoubtedly a deep thinker, and his work will be enjoyed by all who are fond of delving in abstruse subjects.

Ohio State Journal: The essay is written in clear, lucid English, with no affectation of metaphysical patois, so that it can be apprehended by any reader of average intelligence. The other essays in the collection will be found almost equally interesting and suggestive.

Portland Transcript: Dr. Smith is an original thinker, and his volume will attract attention to him and his views.

Galveston Daily News: These essays can not but prove of interest to men who have more than a rudimentary knowledge of science.

Virginian Pilot: Dr. Smith takes as his motto "Nil tam difficile est, quin quaerendo investigari possit," and the masterly way in which the first essay on Memory, and the succeeding essays on "The Philosophy of Emphasis," "Functions of the Fluid Wedge," "The Birth of a Planet," and "The Laws of Riverflow" are treated show that he has lived up to it.

Toronto Globe: His study is interesting, especially that part of it covering the sympathetic relation of all existing things.

The Louisville Dispatch: Instead of being treated as a heavy scientific subject, it is really a scientific prose poem, which, even had it no scientific value, would deserve to be treasured as a literary production. Throughout the work is a very interesting one, dealing as it does with questions that have engaged the best minds for centuries.

Denver Republican: These titles show a wide field of research. They are all deductive as to reasoning and radical in tone, the author not following blindly the generally accepted theories of science, as do so many.

Salt Lake Tribune: Enough certainly for one volume, and containing a vast deal of interesting matter.

Wilmington Morning News: "The Philosophy of Memory," by D. T. Smith, M. D., is a serious work on interesting problems that will appeal to students in a particular line of thought. The writer reveals that he has given the several subjects deep consideration, and what he has to say will appeal to readers who are in search of information upon the several subjects discussed.

Louisville Courier-Journal: The essayist not only shows that by careful reading he has mastered the literature of these questions, but develops original research and thought to a striking degree.

Louisville Commercial: A book which belongs to high-grade and lasting literature, and which carries the valuable qualities of research, thought, and noteworthy theory. These essays use no waste words, and every thought belongs just where it is, and can not be eliminated for the sake of brevity or any other cause. The reader who is interested in the themes will follow the lines from cover to cover.

LACTOPHENIN AS A HYPNOTIC.—A Cristiani (*Il Manicomio Moderno*, 1898, No. 2) recommends the use of lactophenin as a hypnotic. He gives it in doses of from 15 to 45 gr. suspended in sweetened mucilage in the evening one hour after food. He has employed it in over two hundred cases of insanity accompanied by insomnia, and concludes that it has a hypnotic action which is certain, rapid, intense, prolonged, and harmless. The sleep which it produces is deep, calm, and restorative, and lasts generally from four to nine hours. Its use is not followed by any unpleasant phenomena, such as headache and *malaise*. The drug has no cumulative action. It may be safely used even when the patient's physical condition is weak. Like other hypnotics, it has failed to act in certain cases, and in some, in which at first it was successful, it has after a time entirely lost its power. He considers that it is the hypnotic *par excellence* in the insomnia of the insane accompanied by serious involvement of the physical health in any form.—*British Medical Journal*.

ANTIPYRIN INTOXICATION.—Immerwahr (*Berl. klin. Woch.*, August 22, 1898) relates a remarkable case in a woman, aged twenty-eight, who had syphilis in 1894, for which she was thoroughly treated. Nearly three years later syphilitic manifestations appeared, consisting of mucous patches in the mouth and vulva, and also chronic induration of glands. These symptoms again disappeared under treatment. In April, 1898, she took 0.5 g. of antipyrin on account of headache, and on the following day she had a crop of vesicles in the mouth, which soon disappeared. A few days later

she took another dose of 0.5 g. of antipyrin. In the same evening she shivered, and was feverish, and had an urticarial eruption over the body. On the next day there were numerous vesicles on the mucous membrane of the cheek, soft and hard palate, upper and lower lips, and also on the vaginal mucous membrane. The patient thought that this was a relapse of the syphilis. In four days the vesicles began to dry up, but food was taken with much difficulty. The urticaria-like rash had now disappeared. Immerwahr thought that this eruption of vesicles must be due to antipyrin, and therefore made use of nothing but simple treatment. In a few days the eruption entirely disappeared. The importance of the differential diagnosis in this case is obvious. The author remarks that it is necessary to put these cases on record, considering the frequency with which antipyrin, salipyrin, and migranin are used.—*Ibid.*

DR. BRANSFORD'S HEROISM RECOGNIZED.—Passed Assistant Surgeon John W. Bransford, United States Navy, was advanced three numbers by the last Congress for heroism in the naval battle of Santiago. Surgeon Bransford was attached to the converted yacht Gloucester, which destroyed the Spanish torpedo boat destroyers, and having no wounded to demand his care he took charge of one of the rapid-fire guns with marked effect, his conduct eliciting the official praise of his commanding officer. Dr. Bransford had served eighteen years as an assistant surgeon in the navy, but had afterward resigned and was in civil practice when the war broke out. He promptly offered his services and was given a volunteer commission. A bill to appoint him an assistant surgeon in the navy and place him on the retired list passed the Senate but failed to receive action by the House during the more pressing matters which occupied the latter part of its session.—*Boston Medical and Surgical Journal.*

PREGNANCY AND HEART DISEASE.—Jess (*Münch. med. Woch.*, October 11, 1898) has during the last few years collected from his own clinic, and also from those of others, all the material bearing on this question. He says the family doctor is often asked whether a girl should be allowed to marry who is the subject of heart disease. The author's advice in these cases depends upon whether there is a compensation or not. A heart with healthy muscle walls will bear pregnancy and parturition fairly well, provided the patient is still young. Another point to be considered before giving a prognosis is the social position of the patient. The rest, both before and after parturition, is more readily obtained amongst the upper classes. The question of premature delivery in these cases is very difficult to decide. Schlazer brought on abortion in three out of twenty-five cases of pregnancy and heart disease; all three patients died. An abortion usually takes longer than a normal delivery, and this is probably the reason of the fatal termination. Advice is frequently asked during the last months of pregnancy, when it is too late to bring on abortion. Special instruction

is given in Schlazer's clinic in the management of labor in cases of heart disease. The main object in treatment is to deliver as soon as possible with the forceps or turning. As the fetus is passing through the pelvis a sand-bag, weighing from eight to ten pounds, is placed on the abdomen in such a manner that it rests on the fundus uteri; the constant pressure of the sand-bag insures the complete contraction of the uterus; no blood-clots remain behind, which saves the patient from subsequent pains. Alcoholic stimulants are given immediately after delivery. The patient is kept in bed for three or four weeks at least.—*British Medical Journal*.

THE DEATH SENTENCE AND CRIMINAL ABORTION.—Mr. Justice Darling, on Monday last, in charging the grand jury at Chester Assizes, referred at length to the case of William Upton, who is alleged to have killed a woman named Mary Murray, at Macclesfield, by means of an illegal operation. The learned judge referred to the notorious cases which have recently been tried, and pointed out that where the death sentence had been pronounced everybody in court knew that it would not be carried out. Such a state of the law, he considered, put judges in an undignified and absurd position. It was not well that the highest penalty which man had it in his power to inflict should be gravely decreed against criminals with the full knowledge that the whole proceeding was nothing but a sham from the beginning. He advised the jury upon his own initiative, and until some consensus of opinion had been arrived at in the matter, not to return a true bill for murder if they thought that the wound, though inflicted for an unlawful purpose, was not intended to kill, and only to find a true bill for murder when it was intended to kill the woman, or, at any rate, when those who performed the operation did not care if the woman died or not. The grand jury adopted Mr. Justice Darling's suggestion when they came to deal with the matter, and we are glad that they did so, for his lordship's advice runs with our own expressed opinion, that the Treasury (the almost inevitable prosecutor) should always indict for manslaughter only, unless, of course, suspicion is present that a deliberate attempt has been made to take life by a uterine wound.—*Lancet*.

SCHOOL EDUCATION AND NEEDLESS INJURY TO CHILDREN.—We have received a copy of an address on the above subject, delivered by Dr. Clement Dukes before the meeting of headmasters, held in London on January 13th and 14th of the present year. It is a powerful indictment of the abominable cast-iron system of present education. It is not the great public schools such as Westminster, Winchester, and Eaton which are so much at fault as board schools and so-called voluntary schools. "This," says Dr. Dukes, "is what prevails. In the 'infant schools,' where the ages range from three to seven years, the morning hours of work occupy from 9 to 12, with a break of a quarter of an hour, and the afternoon lesson from 2 to 4. . . . Children of three years of age are kept at lessons indoors

five hours a day for five days a week." Attendance is not compulsory before the age of five years, but yet "school-room and teacher are provided . . . and attendance is courted for the sake of the government grant." We have no hesitation in saying that the system is extravagant, cruel, inefficient, and hurtful to the health of the coming generation. In addition, far too many subjects are taught. Years ago Kingsley wrote as follows concerning the turnip in the Examination Island: "Can you tell me any thing at all about any thing you like?" "About what?" says Tom. "About any thing you like, for as fast as I learn things I forget them again, so my mamma says that my intellect is not adapted for methodic science, and says that I must go in for general information." We commend this passage to the education department.—*Lancet*.

HOW QUININE MAY FAVOR POST-PARTUM HEMORRHAGE.—Dr. Barton C. Hirst, in his article in the American Text-book of Obstetrics, mentions that quinine given as an oxytocic increases the liability to post-partum hemorrhage, but offers no explanation as to why it should have this effect. It is well known that the presence of white blood-corpuscles is essential to the formation of a blood-clot. Possibly this liability to post-partum hemorrhage after the administration of quinine is due to the fact that quinine interferes with the activity of the white blood-corpuscles, and, if given in sufficient quantities, may do so to such an extent that the coagulation of the blood in the uterine vessels after labor is imperfect.—*H. D. Furniss, M. D., in New York Medical Journal*.

THE REGULATION OF MARRIAGE IN NORTH DAKOTA.—According to the Philadelphia Medical Journal, the so-called "Creel Bill" to regulate marriage has passed the North Dakota Senate. If it becomes law, no marriage license can be granted in that State unless applicants present a certificate from a legally established Board of Examiners showing that they are free from certain diseases, such as tuberculosis and hereditary insanity.

GIGANTISM AND FEMININITY.—At a recent meeting of the Paris Society of Biology (*Gazette hebdomadaire de médecine et de chirurgie*, February 16th) M. Hallopeau showed a male giant who had no beard, whose mammary glands were considerably developed, and whose genitals were extremely small. On the lower part of the abdomen there were enormous varices, and M. Hallopeau suggested that these might have so pressed upon the vasa deferentia or the nerves of the testicles as to have caused their atrophy and consequently the femininity.—*New York Medical Journal*.

LIABILITY OF MASTER FOR ATTENDANCE ON SERVANT.—It is a well-settled doctrine that the master is not by reason of his relation to the servant liable for medical attendance upon such servant. If, however, a physician is called by a master to attend a servant in his employ, such

engagement has been held to amount to a direct undertaking by the master to pay; but if he is called by the master's wife, even with an express agreement that her husband will pay, the husband is not bound unless it can be shown that the agreement is made with his knowledge and consent, or that he subsequently ratified the hiring. The reason for this rule may be readily perceived; the husband is never bound by the contracts of his wife except for necessities furnished to her or to her children; therefore a contract imposing a liability upon him for medical attendance upon a servant, which he is not primarily liable to pay, is beyond the scope of her authority. *Arthur N. Taylor, LL. B., in the New York Medical Journal.*

A LAW ENFORCING PROFESSIONAL SECRECY.—Governor Roosevelt has signed an amendment to the Civil Code which prohibits absolutely a physician from divulging any information concerning one of his patients, either before or after the death of the latter. Up to the present time the insurance law has permitted the physician to testify concerning the physical condition of a policy-holder.

DR. FLEXNER GOES TO UNIVERSITY OF PENNSYLVANIA.—Dr. Simon Flexner, formerly Professor of Pathological Anatomy in the Johns Hopkins University, is now Professor of Pathology in the University of Pennsylvania. He has just been appointed to this chair, which was left vacant by the resignation of Dr. John Guiteras, who has gone to Cuba. Professor Flexner will enter upon his new duties on the 1st of next September.

GRAVE SYPHILIS IN PHYSICIANS.—Von Brandis (*Deutsche medicinische Wochenschrift*, 1898, No. 21; *Monatshefte für praktische Dermatologie*, Feb. 15, 1899) has met with a number of grave cases of syphilis among medical men. The initial lesion was on the finger, and the diagnosis was always a late one, and this fact probably serves to explain the gravity of the course pursued by the disease.

A USE FOR EXHAUSTED DRUGS.—In the March number of the *American Journal of Pharmacy* the editor of that journal, remarking upon the immunity of certain of the domestic animals against particular poisons, suggests that medicinal roots, rhizomes, fruits, and seeds, being rich in nutritive material, may economically be turned to account as food for animals instead of being thrown away as of no value, after their medicinal constituents have been extracted.

TUBERCULOUS PERFORATION OF THE VELUM PALATI.—At the *Societe medicale des hopitaux*, M. Barbier (*Progres medical*, January 28th) recently described a case of tuberculous perforation of the velum palati with tuberculosis of the tonsil and consequent glandular affections. Syphilis, it was asserted, had no part in the affection, and antisypilitic treatment only aggravated the malady, which was ameliorated by applications of ten-per-cent lactic-acid solution and by overfeeding.—*New York Medical Journal.*

Special Notices.

THE usefulness of good Hypophosphites in Pulmonary and Strumous affections is generally agreed upon by the Profession.

We commend to the notice of our readers the advertisement in this number of "Robinson's Hypophosphites," also "Robinson's Hypophosphites with Wild Cherry Bark" (this is a new combination and will be found very valuable) which are elegant and uniformly active preparations; the presence in them of Quinine, Strychnine, Iron, etc., adding highly to their tonic value.

SANMETTO AND IMITATIONS.—I have used Sanmetto extensively for the last five or six years in both old and young, male and female, in all forms of irritation of the urinary organs, from nocturnal enuresis in the young to cystitis in the aged, and have been disappointed in but few cases in obtaining good results. Have tried imitations (owing to their cheapness). The results were unsatisfactory. Have returned to the use of Sanmetto as a sheet-anchor in both acute and chronic conditions of the urinary tract. I obtain speedier and more satisfactory results when given four times a day in dram doses in hot water.

T. B. GULLEFER, M. D.,
Coroner.

Greensburg, Ind.

MALARIAL FEVERS.—Prof. G. Scognamiglio (*Die Heilkunde*) presents reports of his own experience, as well as that of Drs. Loti and Colotti, with quinalgen in the treatment of the various forms of malaria, in which quinine was not tolerated, or was otherwise objectionable. Up to the present time they have employed the remedy in 40 cases, comprising intermittent fever, 11 cases; tertian, 7; quartan, 7; masked forms, 10; pernicious malarial fever, 3; and atypical, 2 cases. The results were remarkably favorable in the first class, from 7 to 22 grains being administered three times daily. Equally satisfactory effects were obtained in tertian and quartan fevers, doses of 15 to 22 grains being given eight or ten hours before the occurrence of the attack, until 30 to 60 grains had been taken. In all these cases, as well as the masked forms, the attacks were either aborted or much reduced in intensity, and a permanent cure rapidly obtained. In pernicious types of fever it was usually found desirable to give an initial dose of 30 grains, followed by smaller doses. In the majority of these cases a cure was brought about after ten to twelve days' treatment.

LABOR SAVING: The American Medical Publishers' Association is prepared to furnish carefully revised lists, set by the Mergenthaler Linotype Machine, as follows:

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

MALIGNANT DISEASE OF THE SIGMOID.*

BY JOHN A. OUCHTERLONY, A. M., M. D., LL. D.

Professor of the Science and Practice of Medicine and Clinical Medicine in the University of Louisville.

Very little has been written on malignant disease of the sigmoid flexure of the colon, and the literature of the subject must be gathered from what has been written on the general subject of intestinal cancer.

In this paper I have endeavored to embody the results of my own observations of the disease, in connection with what seems to me to have been settled by the investigations of others. The etiology of sigmoidal cancer is as completely unknown as of cancer in general.

Even the predisposing causes which have been mentioned, viz: previous inflammation and habitual constipation, are hardly more than conjectures. Baillie expressed the belief that the main cause of the disease, and of its frequency at the flexures, lies in the more marked development of the glands in the lower part of the large intestine, and in the greater susceptibility to injury by the passage of hard bodies at the point where the colon becomes contracted; that is, at the sigmoid flexure. These hard bodies, he says, "by their irritation may excite the disease of scirrhus in a part which was predisposed to it. What we have now said, however, is merely conjecture."

Some interesting facts bearing on the frequency of cancer of the alimentary tract have been related by Dechamp. The gates of entrance and of exit—the stomach and the rectum—are particularly liable to

*Read before the Louisville Medico-Chirurgical Society, March 24, 1899. For discussion see p. 385.

cancerous localization, the stomach more frequently than all other intestinal cancers together.

Cancer of the rectum is four times more frequent than cancer of other parts of the intestine. Leaving out the rectum, one finds the other parts affected in the following order of decreasing frequency, viz: the sigmoid flexure, the descending colon, transverse colon, the ascending colon, and finally the cecum. The small intestine is most rarely affected, especially the jejunum. In 280 cases of intestinal cancer collected by Haussmann, only four were of the jejunum. Duodenal cancer is much more frequent but generally consecutive to cancer of the stomach.

In cancer of all parts, one out of every five will be of the intestine. As Leube states that eighty per cent of intestinal cancers are found below the sigmoid and five per cent in the small intestine, the remaining fifteen per cent must be distributed among other parts of the large intestine. It follows that cancer of the sigmoid flexure must be of comparatively rare occurrence. In my own cases it was always primary, and this, I believe, accords with the experience of others.

It is said not to occur until the age of forty. Every case seen by myself was over fifty years of age. Dechamp mentions that cases have been cited as occurring in adolescents, and even in children. It is supposed to be equally common in both sexes, but it happened that in my cases the proportion was three females to one male. It is possible that a larger experience might change this proportion.

Pathological Anatomy. My opportunities for studying the morbid anatomy of sigmoidal cancer in the dead-house have been very limited, and certainly would not justify any effort at generalization. It occurs as scirrhus, encephaloid and colloid. Sarcoma of the sigmoid must be exceedingly rare.

Beginning in the glandular structure of the mucosa, the morbid process soon invades the other coats of the intestine. For some time it seems like a hard ring surrounding the intestine, increasing in volume on the periphery, while it also encroaches upon the lumen, which steadily, though gradually, becomes narrower until all but impassible stricture is formed. In some cases the neoplasm is lateral instead of annular, when the intestinal wall opposite to it may bulge out quite considerably, and in this way obstruction may be delayed.

In the annular form the bowel above the seat of constriction becomes distended and even thickened, while below the neoplasm the intestine

is found empty, flaccid, and atrophied. In one of my cases an abscess formed at the seat of the stricture which finally ruptured into the rectum.

The growth rarely, if ever, attains very large dimensions. It certainly never did so in any of my cases. Save in exceptional cases, it remains quite movable. The tendency to form firm and extensive adhesions to contiguous parts, which is so conspicuous in cancer of the kidney, for instance, is but feeble and slight in cancer of the sigmoid. Although malignant disease of this part runs a rather protracted course, it but seldom shows much disposition to invade other organs and become generalized. I saw one case, however, where the stomach seemed to be secondarily affected.

Symptoms. In most instances the disease has already existed for some time when the patient seeks medical advice. It is but seldom opportunity is given to study the symptoms in their incipiency. All agree that at first they are vague and variable. The patient gives a history of pain more or less severe, and persistent in the left iliac region; digestive derangements, alternating looseness of the bowels with constipation, and a certain degree of emaciation. After some time, while these symptoms continue or are aggravated, other symptoms are superadded. In a few instances a sudden intestinal hemorrhage alarms the patient and a physician is summoned, when symptoms which had hitherto escaped attention are likely to be found out. Abnormally frequent defecations and bloody discharges containing mucus (sometimes tenacious and glairy) are often complained of.

The feces may come away in small, hard lumps like sheep's dung, and, for considerable periods, are insufficient in quantity. Careful inquiry or observation will now and then reveal the fact that the discharges have been flattened, although the seat of constriction of the bowel is at the sigmoid flexure and not at a lower point. Sooner or later obstinate constipation sets in, and continues to be the habitual condition, although occasionally a spontaneous diarrhea may give temporary relief.

There is always tenderness over the sigmoid, but the abdomen may become distended, tympanitic, and tender to such a degree as to render an examination exceedingly painful, or, for the time being, impossible. The tenderness can sometimes be demonstrated only on deep and steady pressure, while at other times it is complained of even on the slightest touch. This difference is to be explained by the presence or absence

of inflammation, fulness or emptiness of the bowel, and finally by the elevation or descent of the growth into the true pelvis. Pain in the region of the sigmoid is also a constant symptom. I can not recall a single case in which it was not present. It is not always strictly localized in this region, but may extend beyond the part affected. The character is described by the patient as lancinating, burning, bearing down, or cramping, and one patient would simply complain of "pain," and no amount of questioning could elicit a more definite description.

As the disease progresses a tumor forms. This is a diagnostic fact of supreme importance; however, it is not always easy to make out, but on the contrary the tumor may be exceedingly difficult to find. It may be quite small, and, as already noted, does not attain great size. It may be but ill-defined, and sometimes quite movable, almost floating. At other times it is fixed because of adhesions to contiguous parts.

Eichorst judiciously remarks: "It is well to remember that not only does the volume of the tumor seem to vary, but also that a tumor which at times is easily made out may all at once *disappear* and baffle all efforts at detection, being for the time completely hid under coils of intestine distended with fecal matter."

Leube states that a frequent change in the position of the tumor, and in the distinctness with which it can be felt in consequence of the shifting of the intestinal convolutions over each other, a temporary accumulation of feces, etc., is, to a certain degree, characteristic of intestinal cancer, and *pro tanto* of cancer of the sigmoid.

Melena and losses of fresh blood per anum, especially in connection with other symptoms, constitute a valuable indication of the existence of malignant disease, but not as to its seat in the abdomen. Usually the fresher and the more fluid the blood, the lower in the intestinal canal will be its source. Intestinal hemorrhage generally occurs late in the disease, and, as a rule, only after ulceration of the neoplasm has set in.

The discharge of pus or sanious matter, either with the blood or during defecation, and having a peculiar but characteristic odor, is strongly confirmatory of the diagnosis of malignant disease. Even at a comparatively early stage the rectum is found to be habitually empty, which naturally suggests the existence of an obstruction higher up.

In cancer of the sigmoid flexure, as well as in cancer of certain other parts, the temperature is likely to fall below the normal. It may not be so in the earlier stages, but in course of time, as the ravages of the

disease increase, as nutrition becomes more and more impaired, the temperature falls to a sub-normal degree. This decline in bodily heat is not necessarily very great, but its significance lies in its persistence. Of course, inflammatory complications may arise from time to time; toxemic conditions may develop and bring with them thermometric excursions of more or less considerable elevation and duration.

But even in such cases, where there was a febrile rise of temperature at some time each day, the average temperature of the whole twenty-four hours would be decidedly, though not dangerously, subnormal. This is a point of value in the diagnosis of internal malignant disease, but it is of no assistance in determining its exact seat.

In going over the symptoms complained of by my patients suffering from sigmoid cancer, I am reminded of two which cause a great deal of inconvenience and even distress: First, excessive dryness of the tongue, which was not due to a glycosuria nor to sleeping with the mouth open, nor to unusual losses of water from the system, either by the kidneys or intestines. This symptom continued in some cases even to the very last. The second is intense burning in the rectum, not only during and for some time after defecation, but for days and weeks, the patient describing it by saying that it felt "like he was on fire inwardly." Toward the close of the disease the cancerous cachexia becomes pronounced. Emaciation is extreme, and the hydrops cachecticum is usually well marked. The mode of death, if no grave complications cuts the disease short, is asthenia.

Complications are quite numerous. One of my patients died of acute nephritis culminating in uremia. Dechamp states that "perforation of the bladder is one of the most common complications of sigmoidal cancer." It did not occur in any case I have seen. Circumscribed peritonitis, stercoral abscess, obstruction, and finally septicemia complete the list.

Diagnosis. A positive diagnosis is impossible in the incipient stage, and is always more or less difficult even in the fully developed disease. In the absence of appreciable tumor the possibility of intestinal tuberculosis naturally suggests itself. The co-existence of tuberculosis of the lungs, especially in a young person, would decide the question. When tumor has been found it is to be differentiated from fecal accumulation (coprostasis), which may give rise to a doughy, irregular enlargement. Confounding the one with the other is a mistake very easily made. The diagnosis of tumors of the mesentery, omentum, and kidney may,

in some instances, present such difficulties that their differentiation from sigmoid cancer can be established only by an exploratory laparotomy.

Wunderlich gives an account of a case in which the apparent symptoms of intestinal cancer, nodular tumor, severe lancinating pains, and passage of flattened feces were all ultimately found to have been produced by an aneurysm of the iliac artery.

According to Leube the distinction between the carcinomata of the transverse colon and the carcinomata of the ascending colon, descending colon, and sigmoid flexure consists in the slight or complete immobility of the latter tumors, the most movable of them being carcinoma of the sigmoid flexure, since this portion of the bowel has a long mesentery, and is therefore capable of undergoing displacements.

Duration. This is more protracted than in other varieties of internal cancer. Mathews gives it as of about four years, and I think this is the general opinion of those who have given attention to this subject.

Treatment. The medical treatment must necessarily be unsatisfactory. The indications are to keep the bowels open by means of enemata and mild laxatives, to relieve pain, to improve nutrition as far as practicable, to support the failing strength, to treat symptoms and intercurrent complications as they arise. The fulfillment of these indications offers abundant opportunities for the exercise of sound judgment and therapeutic skill. Yet the power of medicine to retard the progress of the disease is almost as completely lacking as the ability to cure it. However, surgery may, at least in some cases, by operative measures, achieve greater and more speedy results. Among these may be counted relief from pain and mitigation of other distressing symptoms, and prolongation of life attainable in no other way. So far as I know there is no case recorded as permanently cured, even by surgical means. That great improvement and more or less lasting stay in the progress of the malignant process can be obtained by surgery is demonstrated by the case of Dr. Fred Lange. At a meeting of the New York Surgical Society, November 23, 1892, he presented a specimen of carcinoma of the sigmoid flexure of the colon, together with the patient from whom it had been removed nearly eight months before, and who appeared to be in good health. No trace of the recurrence of the disease had at that time been found. (*Annals of Surgery*, Vol. xvii.)

LOUISVILLE.

TREATMENT OF DIPHTHERIA.

BY V. U. MOSS, M. D.

In this effort of mine the experience of twenty years' practice in medicine shall give shape and essence to the discussion of the treatment of diphtheria. You need not expect any infallible cure to be announced herein; nor shall all the opinions of the great masters be epitomized; but this is intended to be a faithful account of my treatment of this disease and my reasons therefor.

In the outset I will accept the prevalent opinion with regard to the causation of diphtheria; that is, that the Klebs-Loeffler bacillus finds lodgment in some solution of continuity in the fauces or nasal mucous membrane, principally in the regions enumerated, but it is not impossible for the bacillus to find access to the body and blood of an individual wherever any kind of a wound exists. The most frequent point of all for the initiation of the micrococcus diphtheriticus is the tonsil. Before the general system displays any evidence of disease, before any constitutional disturbance whatever appears, the Klebs-Loeffler bacillus finds a lodging-place in the throat. There it multiplies and remultiplies until the development is sufficient to contaminate the blood, when the chill and fever appear. The bacilli continue to increase, causing a deposit of membrane in and upon the structures attacked, accompanied by sloughing and suppuration in the mucous membrane and contiguous tissues. The ptomaines resulting from the quick dissolution of so many bacilli, together with the sphacelating structures of the throat, speedily contaminate the blood, which, becoming unfit for nourishment and repair to the body, death overtakes it. Upon the theory that diphtheria is first a local disease, and from its original point of inoculation gradually develops and poisons the whole organism, is based the treatment adopted in this essay. If diphtheria can be arrested in its progress at any point, provided that septicemia has not hopelessly overwhelmed the animal structures, a cure may reasonably be hoped for.

When upon examining the throat of a suspected child there is reason to believe that diphtheria is present, give the patient two doses of calomel, containing two grains each, to be given two hours apart. This amount is intended for a child six years of age. The doses should be proportioned to the age and strength of the individual. The

calomel should not be given in a pill nor in a capsule, but must be so administered that it shall come in contact with the throat as much as possible. Begin early to wash or mop the throat very gently with a saturated solution of chlorate of potassa every hour and a half or two hours during the day, and not so often during the night.

Three or four drops of the tincture of chloride of iron should be given about four hours apart. If pain in the stomach is brought on by the iron, discontinue its use at once.

One to two teaspoonfuls of whisky should be given every two or three hours. If the whisky causes a headache or restlessness and seems not to improve the patient's feelings and appearance, it is best to give no more of it.

The patient should be kept comfortable and reasonably quiet. It is best that the recumbent position be insisted upon from first to last, except when the child frets and worries itself too much. If it provokes an unmanageable fellow that is not very bad off to confine him, then allow more freedom in exercise, watching him closely for any signs of fatigue or fainting. The sick-room should be kept at a temperature ranging from 65° to 70° F., with good ventilation, avoiding any draught of air upon the patient. The food may be as much and as rich as the digestive apparatus can successfully dispose of. The bowels should be kept open, but not any more than is required during health. When a day passes without a movement from the primaviæ, give four quarter-grain doses of calomel every two hours, followed by a sufficient dose of some saline to act on the bowels.

Quinine should never be given in a case of diphtheria, not even in a suspected case. Quinine paralyzes the ameboid movements of the white blood cells and nauseates the patient, thereby interfering with proper ingestion of food to keep nutrition up to the healthy point. The leucocytes have a phagocytic action; that is, they arrest any bacteria or cocci that take up lodging in the living tissues of animals. They appropriate to their own digestive organs the bacilli that would be dangerous to the animal economy. They are the sentinels guarding the outposts of life's citadel. Should their strength be paralyzed, their efficiency as protecting agencies would be correspondingly affected. The microbic invasion, if unrestricted in its march through the blood, would soon overwhelm the party attacked, and nothing but death could be looked for. Keep quinine out of your patients, and give the white blood cells full and free opportunity to defend the organisms from its

microscopical foes. Avoid giving a great multitude of drugs. The very simplest treatment compatible with safety will be the most successful.

I am not specially advocating the old calomel treatment of diphtheria, but it is of great advantage begun early enough and given according to the foregoing method. Calomel given loose, so that much of it remains adherent to the throat, greatly weakens the vitality of the microbes. When it enters the stomach it slowly vaporizes through the warmth and moisture found there, and in the form of corrosive sublimate rises to the throat and nose, and for many hours exercises a destructive force against the bacilli in the naso-pharyngeal ramifications. After the first administration of it no further benefit can be looked for from it, except as a laxative, and then it must be given in very small doses.

Where there is much purulent discharge and sloughing with foul-smelling breath, the throat and nose must be syringed out with a three-per-cent solution in water of the per oxide of hydrogen (ten volume). The syringing should be done every two or four hours, according to the gravity of the various cases.

If diphtheritic croup supervenes, it is best treated by placing the patient in a room kept moist and at the temperature of eighty-five or ninety degrees Fahrenheit. Give the child whisky and good food. Allow him to run over the bed, clad only in a light, short gown, so he will not sweat too much. Administer eight or ten drops of fluid extract of Jaborandi, one grain of muriate of ammonia, and ten drops of glycerine every two or three hours. These drugs increase the flow from mucous membranes and assist in loosening the false membrane. Should signs of suffocation supervene, give an emetic. Ipecac is preferred. But should it seem probable that the laryngeal deposit is loosened some (this will generally be after two or three days of the treatment outlined), give two grains of turpeth mineral. This is a very powerful emetic, and should not be administered without plain indications for it.

When the symptoms of laryngeal obstruction grow more profound and it is evident that no other means will deliver the patient from death, you should introduce a tube into the glottis according to the rules laid down by O'Dwyer, but which need not be described here. But I prefer tracheotomy.

It is an operation where you have the operating field before you, and is therefore more satisfactory. No man should allow cowardice to hold

him back from opening the wind-pipe in these cases. No other means offers the least hope of recovery. If you should be suddenly called to a child dying of membranous croup, and not be prepared with a tracheotomy tube, you can open the wind-pipe anyhow and keep it open for a few hours by passing a stout silk thread through each side of the divided trachea and tying the ends behind the neck.

You can obtain a better description of the antitoxine treatment than I can give you by referring to classical works on that subject. I give you my own way of treating diphtheria, and not a compilation of the treatments laid down by the various works on the practice of medicine. If I have offered one thing, however insignificant, that shall give you light on this all-important subject, I have not written in vain.

ROCKFIELD, KY.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, March 24, 1899, the President, Thomas Hunt Stucky, M. D.,
in the chair.

Rhinolith Having a Tooth as a Nucleus. Dr. William Cheatham: This specimen is a rhinolith, and as the encrustations are broken it will be noticed that its nucleus is a tooth. The patient from whom this was removed was a woman, fifty-three years of age, who came to me complaining of tinnitus, and in looking around for some cause of the tinnitus I examined the interior of the nose. I found the left nostril occluded, and in the center I discovered this rhinolith. In the attempt to dislodge it and pull it forward it was pushed back into the nasopharynx, and was coughed up.

A peculiar feature is that this rhinolith formed around a supernumerary tooth. It will be observed that the tooth is rather long and pointed. I have talked with several dentists, who stated that such teeth are always double pointed.

Discussion. Dr. S. G. Dabney: It is a well-known fact that rhinoliths generally form around a foreign body. I have had one or two cases of rhinolith only in an experience of twelve or fifteen years. They were removed by getting a hook around them and pulling them

*Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

out anteriorly. It is a difficult matter to get these foreign bodies out with any kind of forceps, as they can not be grasped in such a way as to dislodge them.

Detachment of the Retina Cured by Rest in Bed, Bandage, and Salicylate of Soda. Dr. S. G. Dabney: Some time ago, in connection with a specimen exhibited by Dr. Ray, I reported a case of detachment of the retina in a boy thirteen years of age. The boy was in ill-health, anemic, thin, hard-worked generally, and the subject of rheumatism. On one Saturday he observed that the sight of his right eye was becoming blurred. He said it seemed as if a black ball was in front of his eye. It continued to get worse, and he consulted me on Monday, forty-eight hours after he observed impairment in vision. The ophthalmoscope showed that it was a case of detached retina. I explained to the family that the prognosis was nearly always bad in such cases, that the great majority of them turned out unfavorably, but that there was a possibility of curing the boy by putting him in bed and keeping him flat on his back for some time, and giving him some tonic medicines. With their consent I took the child to the children's hospital and put him in bed, placed a bandage over both eyes, and began the administration of salicylate of soda. He was kept in bed continuously for three weeks. But within the first week the retina had become again reattached. A week or two after getting up he complained of some flashes of light and other symptoms of discomfort, so the superintendent at the hospital put him back to bed and kept him there for three or four weeks, when he was allowed to get up and has had no further trouble. Probably he was confined to bed longer than was actually necessary, but I was absent part of the time from the city, and the hospital authorities wisely erred on the side of excessive care.

I report the case as a cure of detached retina by the rest treatment, as sight in that eye is about as good as it was before. His vision is $\frac{3}{4}\%$. The case is interesting as one of detachment of the retina cured by the recumbent posture with salicylate of soda and a bandage over the eye.

Retinal detachment may be due either to an effusion beneath the retina, or to traction on the retina. It is often attended by retinal rupture.

Injury to the Eye. Case 2. I saw the following case February 12, 1899. The injury was caused by the explosion of a stove, the lid of the

stove hitting the patient, a woman, in the eye. It also mashed her nose, producing a fracture of the nasal bones. I was asked to see her because of the injury to the eye. There was a deep cut of the eyelid and a violent contusion of the eyeball. Examination at the time simply showed traumatic mydriasis (dilated pupil) and dislocation of the lens; the crystalline lens had been dislocated downward and outward. The vitreous was quite hazy, and the patient exceedingly nervous, so it was difficult to get a perfect ophthalmoscopic picture.

She was put to bed, and heat was applied to the nose, and I believe the surgeon who was called had taken a stitch or two in the skin to unite the broken edges. The vitreous humor cleared up under the use of simple atropine and cold applications, and it has turned out that in addition to the traumatic dilatation of the pupil, which has remained, and dislocation of the crystalline lens, she also has a rupture of the choroid. So there are three results of this contusion.

The woman's sight has improved very much with the clearing up of the vitreous humor, but it will never be perfect, largely because of the dislocated lens, and also because of the traumatism inflicted upon the choroid and retina.

In regard to the traumatic dilatation of the pupil: Those cases are not very uncommon; I have seen a good many of them. The books say they are generally due to a slight rupture of the superficial part of the iris, but I have never been able to detect such a rupture upon examination. The dilatation is nearly always permanent, and is sometimes accompanied by loss of accommodation.

Case 3. The other case was a little boy who was hit in the eye with a whip. He was jumping on a delivery wagon, and the driver swung his whip back and struck him in the eye. He also has dilatation of the pupil. He had an effusion of blood into the anterior chamber and also into the vitreous; his vision when I first saw him was limited to light perception. The diagnosis in this case was held in reserve because a satisfactory ophthalmoscopic examination was impossible; the blood in the vitreous humor prevented it. I simply used atropine and cold applications, and kept the boy in bed, which has resulted in almost perfect restoration of vision, and the blood in the vitreous humor has been absorbed in about ten days.

I report the last two cases as instances of injury to the eye of rather more than ordinary interest, especially because of the rapid and complete absorption of blood from the vitreous. Hemorrhage into this

body is often far more serious than into the anterior chamber, and often leaves behind permanent damage.

Sloughing of the Finger from the Application of Carbolic Acid. Dr. A. M. Vance: I saw the following case to-day, which shows how careful people ought to be in handling medicines they do not know anything about. A servant girl came to my office with her hand wrapped up in a bandage. She said she had burned her finger slightly. I found that the ring finger was gangrenous down to the second joint. I questioned her concerning the matter, and she said her sister put some medicine upon it, being the same medicine which she had used for applying to an enlarged gland in a child's neck. I asked her what it was; she said it was carbolic acid. Her finger had been totally destroyed by wrapping up a slight burn in a solution of carbolic acid.

This is a common accident. I have known of several such instances in my experience. Carbolic acid is an anesthetic and stopped the pain of the burn, but it destroyed the finger down to the point where it was wrapped.

Discussion. Dr. A. M. Cartledge: It has been my experience that some people are remarkably susceptible to carbolic acid. It should never be applied except under the direction of the physician. I am very much afraid of carbolic acid locally, and have used it very little recently. A two or three per cent solution is about as much as I ever use of this drug. I have seen two or three cases of gangrene of fingers from its injudicious use.

Dr. T. S. Bullock: I have not been so unfortunate as to get hold of any patients who possessed such an idiosyncrasy as has been described. My experience with carbolic acid has been that its action is extremely superficial even in ninety-five per cent solutions. I have seen injured fingers, etc., dipped in pure carbolic acid (ninety-five per cent) without any untoward results following. I am very much interested in Dr. Vance's case, and it will be a warning to me in the use of carbolic acid in the future. I have been in the habit of using strong solutions of this drug in the treatment of phlegmons, about infected wounds, etc., and have never seen any bad results, although its application has been kept up continuously for a considerable period of time.

Dr. A. M. Vance: This is the third finger—and I have also seen one toe—that has sloughed off from the use of carbolic acid. It has

usually been in cases where the carbolic acid is bought pure and dropped into water and used without any definite knowledge as to the percentage of strength at which the solution was applied; but I am sure that a finger wrapped up in cloth and carbolic acid and confined there, even if the solution be weak, will produce gangrene. It is a common thing for people to use carbolic acid in the treatment of soft corns, saturating a pledget of cotton with the solution and applying it between the toes. When this is done, it almost invariably eats down to the bone. I think carbolic acid topically applied is a dangerous remedy, particularly if used without any discretion. I have seen several cases of carbolic acid poisoning by the topical application of the drug.

Dr. Wm. Bailey: It would be interesting to determine the method by which carbolic acid produces the results stated. How is it that carbolic acid can do such a thing as this? Is it by controlling the blood supply primarily, or by its effect upon the nerves? The nutrition is evidently destroyed in some way, but whether it is through the action of the poison upon the nerves of the finger or through its local action upon the blood-vessels seems not to be understood. We know that gangrene may be produced when the nerve influence is destroyed.

Dr. J. A. Ouchterlony: Speaking of the use of powerful local applications, I am reminded of a visit I had from a young lady who had been troubled with warts on her hands and fingers, and who had undertaken to treat herself. She went to a drug store and bought some pure hydrochloric acid and applied it with such regularity and assiduity that when she came to see me she had at the former sight of each wart a deep excavation penetrating down to the bone. Even then she had not desisted, but continued the daily application of the acid. Of course I made her stop the use of it, and in the course of a few weeks these deep ulcers had healed.

Sarcoma of the Pelvis. Dr. A. M. Vance: I have had under observation for three months a gentleman sixty-two years of age. I think he was seen about the first of the year, with what I take to be a sarcoma, more than likely of subperiosteal origin, springing from the inside of the right ileum. The man is very thin and anemic, and is blind in both eyes. What the nature of his eye trouble is I do not know. This growth has increased with wonderful rapidity; it extends now up to the ribs and more than half way across the abdominal cavity,

and has evidently involved the whole ileum, the hip-joint, and half way down the thigh.

The point I want to raise is a discussion of the use of Coley's erysipelas-prodigiosus toxin. Dr. Gilbert saw the man a few days ago and suggested that Coley's fluid be tried, stating that he was treating a patient with sarcoma of the liver that was being markedly benefited. I had already explained this method of treatment to the patient, and had given the opinion that it would be of very little use, and that there was some danger in its application. He has been excited very much since Dr. Gilbert saw him in regard to the use of the toxin. He has also been seen by Dr. Bodine, who advised against the use of the toxin. I would like to know what the experience in Louisville has been with the use of this agent in treating inoperable sarcoma. Has there been a single case in which benefit has followed the injection of Coley's fluid? I have heard of its having been tried several times, but have never known of a case that did not go along and die in the regular way. Coley is more than enthusiastic on the subject, and there have appeared some very favorable reports in medical journals coming from Eastern cities, but very few in this part of the country. Keen and Senn reported fifteen cases each in Baltimore where Coley's fluid had been used without any result whatsoever. I understand Coley makes the statement that he gets a cure, or at least marked improvement, in over fifty per cent of cases treated by his method. I know of one physician in Shelbyville, Ky., upon whom Coley practiced this method of treatment, who went along and died in due course of time. I had a patient from Western Kentucky who had an inoperable sarcoma of the upper jaw, and suggested that as it was an inoperable case he go to New York and consult Dr. Coley. Coley injected him three times, and some weeks afterward I had a letter from the patient's son saying his father had been much improved by the injections. This is the only expression of the kind that I have seen or heard of from the injection plan of treatment in this part of the country. If any of the Fellows have had experience with this treatment, I would like to hear from them. Owing to this patient's debilitated condition, I am afraid of injecting Coley's fluid.

Discussion. Dr. A. M. Cartledge: My experience with Coley's fluid has been confined to three breast cases, one of recurrence after operation and two inoperable cases. I will say that so far I have been very

much disappointed in the use of the toxin. In the patient who had a recurrence of breast cancer I am satisfied that she was made very much worse, because she had a violent chill to follow the first injection; after a great deal of persuasion she accepted the second one, but I could never get her beyond that. In the other case no result was observed.

Post-Mortem Specimen of Aortic Aneurism. Dr. Ellis Duncan: This is a specimen taken from a man, sixty-five years of age, who died at the city hospital yesterday. He had been in the hospital about two months. There had been various theories advanced as to the cause of his trouble. Dr. Stucky's diagnosis was that of aneurism of the arch of the aorta, which the post-mortem proves to have been entirely correct. The specimen reveals an aneurism of the arch of the aorta with an organized clot, the fibrin being in layers, making the lumen of the vessel about the same as if the aneurism were not present.

The man died from asthenia. He had a severe chronic bronchitis, also some obstruction of the circulation in the portal system which resulted in chronic diarrhea. I suppose the bronchitis was also due to some trouble (probably obstruction) of the circulation of blood through the lungs.

I do not know the full history of the case, but the specimen shows the condition very well. The man gave a history of having had syphilis over twenty years ago.

Discussion. Dr. J. M. Ray: With reference to the laryngeal paralysis in this case, it has been my observation that every case of aneurism of the arch of the aorta that I have seen has had left recurrent paralysis. But this must not be understood to mean that in every case of left recurrent paralysis there is also an aneurism of the arch of the aorta. Bosworth makes a point of this, and claims that of sixteen cases which came under his personal observation, the majority of them were due to other causes than aneurism of the arch. But in the last ten years every case of aneurism of the arch that I have seen in the city hospital or in private practice has been associated with left recurrent paralysis.

Dr. William Cheatham: I examined the patient from whom this specimen was removed during my service at the city hospital, and he had left recurrent paralysis.

Dr. J. A. Ouchterlony: That this man had syphilis reminds me that a good many years ago the statement was made upon high authority

that the vast majority of cases of aneurism of the aorta occurred in persons who had had syphilis, and that the lesions in the aortic walls which preceded the formation of the aneurismal sac were probably a syphilitic arteritis. In this case it is difficult to say exactly what the relations of the aneurismal sac are to the heart, but it seems to be unusually far forward and to the left, and is confined entirely to the left of the heart. In most instances it is the ascending or transverse portion of the arch that is the seat of the aneurismal dilatation. The descending portion of the arch and the descending aorta within the thorax are very seldom the seat of aneurismal dilatation. It is also peculiar that death occurred not from rupture, but from some of the secondary lesions incidental to the presence of the aneurism, such as congestion or hyperemia of the lungs and interference with the return of the venous blood.

Dr. T. H. Stucky: The clinical history of this patient presented some very interesting aspects; the absence of tumor, absence of any bulging over the manubrium, the absence of any localized pain, and the absence of bruit made it very difficult to make a diagnosis. The diagnosis was based upon the absence of any apparent superficial nervous lesion, with recurrent laryngeal paralysis and an exaggerated impulse at this point. I watched the case with much interest. I am especially pleased to see a confirmation of the diagnosis that was made, based upon comparatively simple symptoms.

The essay of the evening, "Malignant Diseases of the Sigmoid Flexure," was read by Dr. John A. Ouchterlony. [See page 369.]

Discussion. Dr. A. M. Cartledge: The paper covers the ground so completely from the standpoints of symptomatology, diagnosis, and pathology that there is little left to be said. The treatment of this disease, whether recognized early or late, may be considered surgical. In regard to the diagnosis, I think the most trouble will arise in connection with tuberculosis. Fortunately tuberculosis of the sigmoid proper is not so common as it seems to be about the cecum. As the doctor has shown in his paper, cancer is more frequent in the sigmoid than it is in the cecum, which is an important diagnostic point. The temperature history is of great value. I made the statement that this was a surgical disease as far as its treatment is concerned, whether recognized early or late; I base that upon the fact that if seen even very late after obstruction, after a considerable tumor has formed, with

pain after the lumen of the bowel is obstructed, it is astonishing how much good can be derived in the way of prolongation of life and relief of the obstructive symptoms by anastomotic procedures in this locality. There is one striking feature about cancer of the alimentary canal, and that is its exceeding chronicity. From my experience I would be inclined to say that the duration of life in cancer of the sigmoid and colon is even more than four years. I am sure that I have known a patient to live eight years with a cancer of the sigmoid flexure. Of course it is always a doubtful question whether primarily the neoplasm was not of a simple nature, which later has undergone secondary malignant degeneration. The only case of cancer of the sigmoid that I have submitted to operation was an advanced case that I have reported before this Society as being the first instance of the use of the Murphy button in Louisville. The result in this case was so striking in what appeared to be an almost hopeless condition that it leads me to say that we ought to operate upon all these cases, provided obstructive symptoms occur, even although there be an enormous tumor with advanced and pronounced cachexia. This lady was over fifty years of age, and had marked symptoms of intermittent obstruction, which finally terminated in complete obstruction. The bowels were in the habit of going from ten to twelve days without moving, long periods of constipation alternating with diarrhea, and during the latter period there was complete obstruction, it having been eighteen days since the bowels had moved when the operation was performed. There was enormous distension of the remaining portion of the large bowel; it was three or four times its normal size, filled with liquid feces, and there was a tumor which could be felt behind the uterus as large as my fist. The diagnosis was not made positively in this case whether there was pressure upon the bowel from without or whether the tumor was connected with the bowel itself. An exploratory incision was advised for diagnostic purposes. Nor was the diagnosis of malignancy made positively. We did not know but we had a floating pedunculated fibroid tumor that had formed adhesions, exerting pressure upon the sigmoid and producing obstruction in this way. When an exploratory incision was made the bowel was found enormously distended above the tumor, which proved to be a cancerous growth of the sigmoid. I opened the bowel above the distension and anastomosed the descending colon to the rectum below with the largest sized Murphy button, which was a difficult matter on account of the enlarged and infiltrated condi-

tion of the bowel. The patient passed the button on the eighth day, and there almost immediately passed an enormous quantity of liquid feces, resulting in great relief. She made a rapid and complete recovery from the operation. The operation was performed in March, and the tumor at that time I am sure was as large as my two hands closely grasped, and obstruction was complete. She lived until the following February, and then died as the result of an accident, having fallen from a chair, striking the back of her head. The bowels had performed their functions and had moved satisfactorily during the period of almost a year after the operation. Dr. Mathews was present at the operation and will probably remember the case. The result obtained in such an extreme case as this leads me to say that although the case is inoperable from a curative standpoint, the results following the palliative treatment of anastomosis are such that I do not believe we ought to deny this to any of these patients.

One word in regard to the operation of excision, where the patient is seen sufficiently early. I firmly believe that from the nature of this disease, its slow progress in this locality, we have the best assurance of success if any thing like complete removal of the disease can be practiced, by excision. I certainly would not hesitate, even in rather advanced cases of cancer of the sigmoid, to excise the growth and practice either anastomosis by the button or suture, whichever seemed most advantageous. I think the prognosis of radical removal of cancer of the alimentary canal is the best of any part of the body. The rectum, in my experience, if the case is seen early enough, is certainly the best part of the body from which to remove a cancer, so far as permanent results are concerned. The same thing will apply to cancer of the sigmoid flexure.

Dr. Turner Anderson: Cancer of the bowel of the scirrhus, encephaloid, colloid, and epithelial varieties are not so exceedingly infrequent. The special feature of interest in a general way may be said to center, to those of us who are doing any work in pelvic surgery, in the great difficulty of making a diagnosis. The symptoms are so insidious and the diagnosis is so difficult that we may really mistake almost any intra-pelvic affection with pressure symptoms upon the bowel for malignant trouble.

I saw to-day a woman who presented many symptoms of malignant disease of the bowel, and yet I believe she is suffering from pelvic inflammation instead of carcinoma. Difficulties of this kind are only

cleared up by an exploratory incision. The symptomatology does not help us very much. The fact that cancerous affections of the bowel are more frequent in connection with the bend in the bowel constituting the sigmoid flexure, that they are not often found within three inches of the anus, helps a little; but it does not assist us in a positive way. I really do not know that we have any special lines to guide us in doubtful cases except an exploratory incision.

Dr. W. O. Roberts: I was surprised at the statement of one of the authorities quoted of cancer in this locality occurring in so young a subject. It is generally conceded now that cancer is exceedingly rare under thirty years of age. Sarcoma occurs before this time; but sarcoma is more frequent in other portions of the bowel than in the sigmoid. My experience with cancer of the sigmoid proper is very limited. I can recall but two cases where only the sigmoid was involved, and in both of these the symptoms developed suddenly, that is, alarming symptoms drawing attention to the disease. The symptoms were those of obstruction, and they came on suddenly. One of them I saw with Drs. Mathews and Grant, and this case is reported in Dr. Mathews' book. In this case the man had been the subject of constipation for a long time, and when the condition of obstruction came on he was apparently in perfect health. He had lost nothing in flesh. He was a large man, and weighed over two hundred pounds. His rectum was entirely free from the disease, it being confined entirely, as far as the examination showed, to the sigmoid. This man lived in the city, and was afterward operated upon. The other was an out-of-town case, and I was called to see him because of obstruction of the bowels. In this case there had been no hemorrhage, and nothing but pain indicating the seat of the trouble. Obstruction was complete, his abdomen was enormously distended, and I did a colotomy. He lived several months after the operation, but finally succumbed to the disease.

Dr. J. M. Mathews: I am surprised to hear my friend Dr. Roberts say that he can only recall two or three cases of cancer of the sigmoid flexure where the rectum was not involved. I have seen in twenty years over one hundred cases of cancer of the sigmoid flexure where the rectum was not involved. I am sure of my diagnoses, because the patients died of cancer.

In regard to the symptomatology, Dr. Anderson says that it is not of much avail in these cases. In a certain way I believe that is true,

yet in another I doubt whether it is true. I believe if you will take such patients and observe them clinically after a certain length of time that no mistake will be made as far as cancer of the sigmoid flexure is concerned. I do not know of any other disease with which it is closely allied, I mean in symptomatology. If you have in a general way loss of flesh, the peculiar characteristic color, though I am not a great believer in the cancerous cachexia, with localized pain over the flexure, with a discharge of mucus, blood, and pus, when upon examination no disease of the rectum is found, it is safe to presume that the disease is in the sigmoid flexure, and that it is cancerous.

In regard to the diagnosis, it is, as the other speakers have said, very perplexing. A few years ago I reported a case to the Louisville Surgical Society which appears so opportune here that I shall refer to it again. I was called to a town in Indiana to examine a business man whose doctor supposed he had some serious trouble with the sigmoid flexure. The patient himself met me at the station in his carriage. I observed, as Dr. Roberts has said, a man in good physical trim, without the loss of a pound of flesh, and I was surprised to see my patient meet me at the station. We drove to his house, and it struck me then to ask why they had sent for me, and I was told that the man had suffered from obstruction, although he had had a free action of the bowels that day before I reached him. I traced his history as well as I could, and took into consideration the symptoms I have mentioned, and said to his doctor, this man in my opinion has cancer of the sigmoid flexure, and I do not believe it is justifiable just now to do a colostomy, as you have called me to do; but at any time you will write or telegraph me to come, I will do so and perform the operation if it seems advisable. I returned home, and the doctor the next day advised the patient that inasmuch as they had consulted one surgeon, that it might be well to consult another, and asked him to go to Chicago and see one of the most distinguished surgeons in this country, which was Dr. Senn. Dr. Senn gave him a most careful examination, stripping him as I had done, and informed him that he had no trouble with the sigmoid flexure, not to speak of cancer; that he should return home and go to work. I confess under the circumstances I felt considerably embarrassed. In a short time, certainly in less than two months, the man was walking along the street, had a sudden pain, fell to the street, was carried away, and died in half an hour. I was so informed, and telegraphed my friend, Dr. Cook, of Indianapolis, to please go to the town where the

patient had lived and hold a post-mortem examination. He did so, and the result of the post-mortem was that he sent me the sigmoid flexure, which is the seat of a cancer as large as my two fists. This will evidence at least what Dr. Anderson has said, that it is very difficult to make a diagnosis. I contend that in a large, fat abdomen, that no man can make out a tumor or a cancer of the sigmoid flexure positively by palpation. I have seen a number of mistakes made in regard to the matter, and never try to make a diagnosis, but rely almost absolutely upon the clinical history of the case, with the symptoms which I have mentioned.

As to the treatment of this affection, if there is any radical treatment, it will of course be what Dr. Cartledge has said, surgery; but is it the proper thing to do? I must differ with him radically when he says of all sites of the body, that the rectum affords the best operative field, so far as relief is concerned, for carcinoma. I believe of all portions of the body, this affords the least opportunity to the surgeon to relieve the patient. I say this, first, for the reason that the patient never consults you in the incipency of cancer. Secondly, that if a cancer has existed any length of time in the rectum, the contiguous parts are infiltrated—there can be no question about this, because it is natural that they should be—and every surgeon knows that to remove a rectum with any part contiguous infiltrated would not relieve the patient or even prolong life; but if it is located in the sigmoid flexure, what should be the treatment? Now, gentlemen, after twenty-one years in dealing with this condition of affairs, and treating it in every manner, and seeing surgeons in almost every portion of the country operate for it, I must say that I believe that a surgical operation is in the vast majority of cases unjustifiable. I saw Dr. Cartledge do the admirable operation to which he has referred. The result in that case was very positive. Bacon, of Chicago, has suggested that anastomosis should be done around the cancer of the sigmoid, attaching the colon to the rectum. We must recognize that this procedure would leave the growth, although the anastomosis might be successfully practiced. The same objection to anastomosis might be preferred as is preferred to colostomy, you give vent to the feces, but you leave the growth. The person must die of cancer in the same length of time, because total obstruction is very rare, if you will examine the literature of the subject, in cases of cancer of the sigmoid flexure. Anybody will admit that if there is total obstruction which can not be overcome, that the

surgeon is perfectly justified in doing either resection, anastomosis or colostomy; but if you will take the class of patients I am sure the essayist has mentioned, old women, and it has been my privilege to see a number of them with Dr. Ouchterlony, old women sixty to seventy years of age, feeble because of the cancerous condition, not suffering much pain, why subject them to either of these operations? Every one knows that patients with cancer of the sigmoid flexure do not suffer much pain; I never saw one that did; they do not suffer as much as they would with chronic dysentery; pain is not a factor in cancer of the sigmoid; neither is it in cancer of the rectum except it involves the sphincter muscle. Then pain not being a factor, you are certainly not going to perform a capital surgical operation to relieve pain, because it does not exist.

Such patients have actions from the bowels, it may not be a normal, well-formed action, but these patients are dieted and they pass fluid, watery feces and are relieved by the procedure. Therefore total obstruction can only be operated for when total obstruction exists. If, then, you do not operate for pain, if you do not operate for total obstruction, and neither of these conditions exists; if you do not operate for hemorrhage, and hemorrhage seldom occurs, why should you operate upon these patients at all? You may say to prolong life; how much will operative measures prolong life? If I had a cancer of the sigmoid flexure I would not want any one to do a major surgical operation upon me to prolong my life and leave the cancer in my body. That is a strong argument. If it was to relieve suffering, it would seem reasonable to operate, but my experience teaches me that this does not occur. If you are going to do a surgical operation, what shall it be? From a rational surgical standpoint I believe that Dr. Cartledge is right. Here you have a loop or bag, it is not contiguous to other parts, nor bound to other tissues; you can take it out, you can resect it, you can anastomose it. It does look to me that is plausible; but if the patient is an old, enfeebled woman, do you want to take out the sigmoid flexure? Do you want to resect it; do you want to make an anastomosis? Of course this is rational, ideal surgery. Secondly, a colostomy. I am on record as a non-believer in this operation for cancer. I have performed it seven times. I always say that I have regretted seven times that I have done it. It is an ugly operation, and leaves the cancer there. By this operation you may relieve the obstruction, give vent to the feces, but you leave the cancer.

I have seen one case of cancer of the sigmoid flexure and rectum in a girl seventeen years of age, and one case in a boy twelve years of age. I believe I am correct in my statistics that the vast majority of cases of cancer of the sigmoid and rectum occur in patients over fifty years of age; that it is a disease of advanced life.

LOUIS FRANK, M. D., *Secretary.*

NEW YORK ACADEMY OF MEDICINE—SECTION IN ORTHOPEDIC SURGERY.

Meeting of March 17, 1899.

Lateral Deviation of the Spine and Pes Cavus in Friedreich's Ataxia. Dr. W. R. Townsend presented a boy twenty years of age. Since an attack of scarlatina at the age of seven his nutrition had been very poor. The first signs of ataxia were an unsteady gait and inability to keep from falling if pushed. For the past seven years he had had frequent pain in the knees. Lateral curvature of the spine appeared three years ago and has steadily increased, a long curve to the right extending from the ninth dorsal vertebra downward, with rotation. A plaster of Paris corset had been applied with moderate suspension. There was pes cavus but no equinus. The gait was markedly ataxic. Standing with the feet separated and eyes closed, there was swaying of the body. The patellar reflexes were lost. Speech was slow. There was nystagmus, but no Argyle-Robertson pupil.

Dr. J. Collins said that it was a clinically typical case. In addition to disease of the posterior columns, there was sclerosis of the lateral parts of the cord, including the direct cerebellar tracts, shown in persistent efforts of the patient to balance himself, and producing the peculiar condition found in every case and heretofore undescribed, aptly named the fork-prong condition of the extensor tendons, the feet being in continual balancing action, with the tip of the toes digging into the substance of the floor. The dynamic deformities, which later became static, were the result of some connate lack of development in the anisotropic muscular substance. The deformity might be explained by postulating the existence of some congenital incapacity of development, some abnormal condition of the proton of the muscular substance. The disease was progressive and usually uniformly so, and might extend through half a normal lifetime. There was some-

thing attractive about the theory that some fibers of the spinal cord might have suffered *death* fifty or sixty years before the normal time, a death without active inflammatory or degenerative changes and akin to that which attended senility. The plaster of Paris corset could have no influence on the disease, but it had, in his experience, contributed to comfort. A potent agent in restoring the function of the muscles was the re-education of the extremities. The patient might be so taught that in a few months he would be able to walk into the room without perceptible disturbance of gait.

Dr. S. Ketch said that the association of nervous disease with lateral curvature was suggestive. Many features of the latter affection could not be explained except by the presence of some prior defect in the nervous system. The case came near being an argument for the neural etiology of lateral curvature.

Dr. H. L. Taylor said that the argument was not convincing. The coincidence of nervous disease could not establish the neuropathic origin of lateral curvature, which we saw also in collapse of the lung, without rating pulmonary disease as an important etiological factor.

Dr. A. B. Judson said that a nervous origin was not altogether improbable from the observation that the curvature appeared to be due to inability of the muscles to sustain weight, while the muscular failure seemed to be the result of faulty innervation.

Dr. Ketch said that in the absence of a demonstrable etiology he would adhere to the opinion that a large number of cases were caused by an antecedent fault in the nervous system.

Congenital Deformity of the Lower Extremity. Dr. Ketch presented a girl baby two months old with great bony deformity of the right lower extremity. There was a shortening and twisting of the upper end of the femur, and all the bones were smaller than those of the left leg. The fibula was indistinct, giving only the feeling of cartilaginous hardness. The place of the patella was marked by a slight immovable eminence. There was marked equinus with inversion; the motion of the knee was greatly limited in extension, and the spine was slightly deviated to the left in the lower dorsal region. There was dimpling and adhesion of the skin to the outer side of the lower end of the femur. The head had presented in an easy labor with the cord wound around the body so that it held the right foot on the left buttock, "so tightly bound there was no blood in the leg until an hour." The

cause of the deformity was evidently retention of the parts in the fetal position by pressure of the cord, the limb being unable to escape and develop normally.

Dr. Taylor said that the bones were all present, but the fibula seemed to be fully developed only at its lower end, and the deformity of the foot was not the one usually associated with absent fibula. In these cases some bone was usually lacking or rudimentary.

Dr. V. P. Gibney said that the clear history sufficiently explained the cause of the deformity. He recalled the case of a child born with dislocation of both hips and both knees, arrest of development being found at the knees, and double club-feet of an exaggerated type. The elbows were defective, and the movements of the shoulders rather limited. Repeated operations had been required with plaster of Paris retention, and, as a result, the patient had for several years been walking about and going to school without apparatus or any other assistance. He had under observation another child with prenatal amputation of several fingers and double club-foot with arrested tibial development. The fibulae being very much elongated, he had divided them obliquely about two inches above the malleoli and slipped the distal portion up on the proximal, thus bringing the foot into very good position.

Congenital Lateral Curvature of the Spine. Dr. R. Whitman presented a girl seven years of age whom he had first seen when she was nine months old. She then presented a well-marked rotary lateral curvature of the spine that had been noticed by her mother immediately after birth. In spite of the application of braces and manipulation the curvature grew worse rapidly until two years ago, when the tilting of the pelvis was so extreme that there appeared to be marked inequality in the length of the legs. The degree of the deformity was seen in a Roentgen picture. Since that time she had been under treatment by irremovable plaster jackets, applied with as much corrective force as could be borne, with most gratifying results. The pelvis became level, and the limp had disappeared. The spine had become flexible, and its deformity had been in a great part corrected. This method of forcible correction and retention in severe curvatures of this class in young children appeared to offer the best chance of ultimate success.

Dr. G. R. Elliott said that the child's head, shoulders, hips, and lower extremities were developed far beyond the thorax as one of the

results in two years' encasement. The plaster of Paris jacket is advisable in proper cases, but it should be renewed once in three months, and should be removed at least weekly to permit breathing exercise and massage.

Dr. R. H. Sayre said that bad effects do not necessarily follow prolonged treatment in the plaster jacket. He recalled the case of a boy affected with rachitic lateral curvature, who was unable voluntarily to stand in an upright position. He was kept in solid plaster of Paris for a period of three years. When the jacket was removed, treatment to develop the muscles restored them to as good condition as the muscles of the rest of the body.

Dr. Taylor said that he did not hesitate to immobilize joints and their acting muscles for years, if necessary, to arrest disease. He had never seen a case in which, after such treatment, the muscles were not developed to the limit imposed by joint-motion. It had been demonstrated clinically that when motion was restored to knees ankylosed for many years the muscles assumed their functional activity.

Dr. Ketch said that atrophy of muscles and stiffness of joints caused by the application of plaster of Paris or a brace were of no serious moment, and were followed by no ultimate bad effect.

Dr. Elliott believed that permanent injury followed prolonged confinement of children in plaster of Paris forcibly applied. He had a patient under treatment who had been thus treated for seven years, and was, as a result, a hopelessly bed-ridden invalid. It might be an exceptional case, but with a neurasthenic temperament and enfeebled muscles present the injury would extend beyond the possibility of rehabilitation. The muscles might revive, but the bones and cartilage of the thorax would be atrophied to the ultimate impairment of the heart and lungs.

Dr. Townsend suggested that the same improvement might have been secured if the jacket had been replaced by a firmly-applied corset, whose occasional removal would have permitted the employment of massage.

Dr. Whitman said that the child had worn a brace, which the mother was instructed to remove and give the child massage, but until the jacket was applied, as described, the patient grew steadily worse.

The Effects of Gymnastic Exercises in Remedying the Displacement of the Heart in Lateral Curvature. Dr. T. E. Satterthwaite presented

a paper to the effect that the mal-position of the thoracic and abdominal viscera, which attended well-advanced cases of lateral curvature, might be considered as a constant menace to health, and it could be inferred that the thoracic pain of this affection due in some patients to neurotic conditions was due in others to the faulty position of the heart, which was generally displaced toward the concavity. He presented a patient, a young woman twenty-four years of age, affected with lateral curvature toward the right in the dorsal region of the spine. The pelvis was tilted, and the left breast was prominent. When first seen in the summer of 1898 she was pale, anemic, and short-winded. The heart's action was weak, and the apex one inch to the left of the nipple. After three months' treatment with resistant exercises, electricity, gymnastics, and massage, the anemia was corrected, the heart's action was improved, and the apex was well to the inner side of the nipple line. Its change in position was traced in diagrams taken successively during the progress of treatment. Two other patients were presented with similar histories and with diagrams showing the migration of the apex during treatment and coincidently with the improvement in the general and local condition of the patient. These patients illustrated in person a long series of appropriate exercises, in many of which indicated muscles were called into action by resistance applied by a medical attendant. The exercises were taken by the patient standing erect, leaning against a support, sitting, recumbent, semi-recumbent, or suspended by the hands. In the majority of cases there was an advantage in combining force for the reduction of the deformity with some of the prescribed exercises, and manual force should be applied without the assistance of mechanical apparatus. Double pressure should be made when practicable, one hand being placed upon the dorsal convexity and the other on the lumbar convexity, each pressing toward the spine. As a rule, tonics or nutrients were required—iron, strychnine, codliver oil, and malt extracts. Massage of the muscles of the back was a valuable adjuvant, and the faradic current might be applied successfully during the entire course of the treatment, employed so as to contract actively the muscles of the back. An effort should be made, where practicable, to do away with the spinal brace, which should be advocated only as a temporary expedient or in cases in which all other measures had failed. By pursuing a more thorough and painstaking course than that commonly in vogue, the heart, and with it the lungs, and in time the

abdominal viscera, might in a measure be restored to their natural position.

Dr. Sayre said that inspection of a preparation of lateral curvature showed that suffering from impeded action of the heart and lungs probably attended cases of well-marked deformity. As a rule, however, such patients were not prone to die of disease of the heart or lungs, and, although perhaps somewhat disturbed, they lived to a good old age. He had seen distinct relief of shortness of breath from treatment by exercises, and patients in whom the rapidity of the heart-beat had been materially reduced. In one case the pulse-rate came down from 120 to 90 when suspended, and 107 when in a plaster of Paris jacket. He had a patient under observation in whom a murmur distinctly audible at some distance and in certain positions of the body, and sounding very much like a tin whistle, had disappeared under the influence of exercises.

Dr. Satterthwaite said that the murmur has been probably due to anemia and a flabby condition of the chambers and ostia of the heart. He did not think that cardiac displacement in these cases gave rise to abnormal sounds, extrinsic or intrinsic.

Dr. H. S. Stokes said that he thought it was very difficult to say whether the position of the heart had changed or not. It was the opinion of some observers that the heart could not be accurately mapped out during the life of a normal chest. In a chest deformed by lateral curvature the element of possible error must certainly be a large one. In his observation, the result of treatment had been an improvement in the general condition of the child, and the prevention of an increase of the deformity rather than an obliteration of the curvature.

Dr. Satterthwaite said that while many physicians among the Germans and English rejected methods of mapping out the heart, in this country observing the heart in this manner was accepted as practicable and important. He believed that it was easy to determine the position of the apex by the impulse, and also by the use of the stethoscope.

Dr. J. Teschner said that the heart could not be directly affected to an appreciable extent unless the deformity was so great as to crowd and displace it. He had not mapped out the heart in his cases, but its change of position as the result of treatment by heavy gymnastics had been obvious. In a girl nineteen years of age a very severe rotary lateral curvature of at least ten years' duration was combined with cardiac trouble dating from acute articular rheumatism and peri- and

endo-carditis at the age of four. There was marked hypertrophy and dilatation, a double aortic murmur, a double mitral murmur, and a very decided murmur over the pulmonary with the second sound. The murmurs were very widely transmitted. Dyspnea was marked. Slight cyanosis at rest became marked on the slightest exertion. The heart had been growing rapidly weaker, edema had appeared, and her physician believed that she would live only a year or two longer. Beginning with very gentle exercises, in six months she was practicing heavy gymnastics, and her physician expressed surprise at her improved condition. He found the heart smaller and changed in its relative position to the chest wall, and none of the murmurs except the pre-systolic mitral transmitted to the side and back as before. Dr. Teschner believed that the deformity could be reduced by the voluntary and resisted efforts of the patient and not by external force. Electricity and massage were valueless when compared with voluntary exercise. The more the patient exercised the muscles through the medium of the will the greater would be the benefit. He thought that the exercises described and exhibited fell far short of what was required, and that their effect in severe cases would be like that of an infinitesimal dose of a drug whose full physiological effect was desired. He thought that one curve could not be modified without a corresponding effect on the compensating curve. The trouble was not the deflection of a single vertebra, but of several, leading to the production of the sigmoid deformity.

Dr. Satterthwaite agreed that the different curves should be considered together as making up the deformity, and added that in the treatment the muscles should be also considered together, as it was impossible to exercise or develop one muscle or group without acting on all the muscles of the region.

Dr. Taylor said that while electricity and massage were good, they were not sufficiently good to cure lateral curvature. Reliance should be chiefly on muscular training and suitable apparatus. He would welcome any possible way of dispensing with apparatus which, useful in selected cases, left much to be desired. The hygiene of the patient was of great importance. The physician should regulate the food, schooling, exercise, and rest. Piano playing was a pernicious occupation for a patient with a weak back. It should be moderated and, usually, stopped. One of the things which had held us back in the treatment of this affection was the difficulty in measuring and record-

ing changes which take place. The position of the heart might, perhaps, in some cases be a useful indication. Measurement of the height from time to time was more easy, and likely to furnish more reliable observations.

Dr. Satterthwaite said that he was in the habit of recording the height as a routine matter, but in growing children such measurements might be misleading.

Dr. Ketch said that apparatus was of value in retaining the improvement gained through exercise, which, when properly conducted, produced a good effect on the deformity, and indirectly on the condition of the heart, for there was no doubt that the changes in the vertebræ themselves and in the chest walls and the diameter of the thorax gave rise to changes in the viscera. As long as rotation persisted no case of lateral curvature could be said to be really cured. This was always a menace, and liable to increase, and was the most difficult element to control. The bony changes which followed the muscular changes also made the treatment of lateral curvature very difficult. Curvature depending on simple muscular weakness was the easiest to control, but these were not cases of true rotary lateral disease. Each man should work out his own ideas in regard to the question of exercises, remembering that no form of treatment would be of the slightest value unless it was continued for a long time.

Dr. Satterthwaite agreed that not all cases were suitable for the treatment which he had described. It could not easily be made successful in the case of out-patients, especially those who lived far away and thus were unavoidably irregular in their attendance. The patients presented were all improving in general condition, the spine was gradually moving forward toward the normal position, while the heart in each had taken an improved position.

A Pelvic Rest. Dr. Townsend presented a simple apparatus to facilitate the application of a plaster of Paris spica to the hip. It held the pelvis and thigh up so that the roller might be conveniently passed between the patient and the table, and when the application was made and set, the thin steel shelf on which the pelvis rested might be readily withdrawn from between the bandage and the patient. It was similar in action to the rest shown by Dr. T. H. Myers at the last meeting of the Society. The standard or vertical part, 6 x 1 $\frac{1}{4}$ x $\frac{1}{4}$ inches, was forged at its upper end into a thin, horizontal shelf 10 x 2 inches, and

at its lower end it was bent at a right angle to form the bar, 11 inches long, which rested on the table. The cross-pieces, 11 inches long, of lighter steel, were provided with mortises, by which they could be removed for packing or adjusted by sliding them along on the bar until they were in position to hold the apparatus firmly, without rocking, on the table.

Reviews and Bibliography.

A Text-Book of Anatomy. By American Authors. Edited by FREDERIC H. GERISH, M. D., Professor of Anatomy in the Medical School of Maine at Bowdoin College. In one magnificent imperial octavo volume of 915 pages with 950 engravings in black and colors. Cloth, \$6.50, net; flexible waterproof binding for the dissecting table, \$7.00, net; full leather, \$7.50, net. Philadelphia and New York: Lea Brothers & Co., Publishers.

In a previous number we announced in unusual fullness the early appearance of this promising work. We feel entirely sure that none of our readers will feel disappointment on becoming acquainted with the work itself.

In one way it is a disappointment. We have looked for a work whose illustrations should have been based on original dissections and drawings produced in our own land. But instead we find them largely borrowed from European workers.

They have been added to, however, in a very creditable way, and taken altogether the authors are well able to say that "every thing that is best this volume strives to embody." The illustrations, it is rightly contended, far outnumber and exceed in size and in profusion of colors those in any previous work, and they can well claim to be the most successful series of anatomical pictures in the world.

The book opens with an introductory by the editor which appears to be an effort to inspire with his own enthusiasm the beginner in anatomy, and it is well calculated to accomplish a task which we have often heard spoken of in hyperbole, that is, clothing dry bones with life. It well reveals the secret of the author's devotion to this most interesting study.

The work is not so exhaustive as such classical works as Gray and Morris, the authors having left off mention of many unimportant relations as only calculated to tax the memory without profit or practical result. Indeed, they declare they would willingly have eliminated more but for the peculiar notions of many examiners who have not yet emancipated themselves from the trammels of tradition.

The authors have succeeded, as they aimed, in making a text-book which, as far as possible, shall stand in the place of the living teacher to the student—selecting from the vast accumulation of material those portions which are likely to be of actual service to the pupil in his subsequent

study and to the practitioner in his clinical work, emphasizing the most important, striving to clarify obscurities, giving the greatest amount of help in the parts which are most difficult to learn, and illustrating every thing by all available methods. An especially valuable feature for students is the handsome flexible waterproof binding, which can be sponged clean without injury as often as necessary.

D. T. S.

A Review of Recent Legal Decisions Affecting Physicians, Dentists, Druggists, and the Public Health. Together with a Brief for the Prosecution of Unlicensed Practitioners of Medicine, Dentistry, or Pharmacy; with a Paper upon Manslaughter, Christian Science and the Law, and Other Matter. By A. W. PURINGTON, of the New York Bar, Counsel of the Dental Society and Lecturer on Medical and Dental Jurisprudence in the New York College of Dentistry. 105 pp. Price, 50 cents. New York: E. B. Treat & Co. 1899.

This little book by one of the collaborators of Allan McLane Hamilton's "System of Legal Medicine" is a work that will meet a widely felt want. It embraces chapters on cases affecting medical men, the purpose and justification of medical laws, dentistry as a specialty of medicine, the pharmacist as a medical man, differentiations of medical men, need of examining boards, and the methods of enforcing medical laws.

These are followed by a form of brief suitable for the lawyer in the prosecution and defense of all forms of alleged violation of medical laws. However justly the author may favor the elevation of dentistry, he does seem to be crowding matters or his school for him in the title of his professorship. We shall next have aural and nasal jurisprudence, and then all the rest in time.

D. T. S.

Saunders' Medical Hand Atlases. Atlas of the External Diseases of the Eye, including a Brief Treatise on the Pathology and Treatment. By PROF. DR. O. HAAB, of Zurich. Authorized Translation from the German. Edited by GEORGE E. DE SCHWEINITZ, A. M., M. D., of Philadelphia. With seventy-six colored plates and six engravings. 224 pp. Price, \$3.00. Philadelphia: W. B. Saunders. 1899.

It would seem impossible that one hundred thousand copies of a medical work could be sold in this country when we consider the number of candidates for professional favor. But of the different volumes of this series the sales have already passed this mark, and are well on the way toward two hundred thousand.

Twenty years ago an atlas giving all that the volume before us gives would have been published in fascicles by subscription, at a cost of perhaps never less than twenty or thirty dollars. But in each of these, owing to improvements in color printing and the advance of skill as well as science, the student will find in a comparatively small volume a vivid illustration of all the points in the various branches of medicine that can be presented in this way.

In this volume every form of disease of the eye whose study can be facilitated by illustration is portrayed in colors, so accurate and lifelike that it offers all the advantages of an extensive clinic.

These works are works of diagnosis only, and as diseases do not change, they will never need to be thrown aside, unless possibly, and it seems only possibly, they shall be greatly surpassed by some other in excellence.

D. T. S.

Practical Materia Medica for Nurses. With an Appendix Containing Poisons and their Antidotes; with Poison Emergencies, Mineral Waters, Weights and Measures, Dose List, and a Glossary of the Terms Used in Materia Medica and Therapeutics. By EMILY A. M. STONEY, Graduate of the Training School for Nurses, Lawrence, Mass.; Author of Practical Points in Nursing, etc. 306 pp. Price, \$1.50. Philadelphia: W. B. Saunders. 1899.

This work is a compilation whose chief merit is its simplicity. It is such a work as might be needed by an intelligent trained nurse who wanted to gratify her curiosity as to what the doctor was giving and to follow intelligently his directions.

The part relating to poisons forms a ready working guide, though it is not to be hoped that great success is to follow the antidotal treatment of poisoning by persons of such attainments as are to be expected in those who are likely to use this book.

D. T. S.

Materia Medica and Therapeutics. An Introduction to the Rational Treatment of Disease. By J. MITCHELL BRUCE, M. A. (Aberd.), M. D. (Lond.), Examiner in Medicine in the University of Cambridge, etc. 609 pp. Philadelphia: Lea Brothers & Co.

This book is offered as a rational guide to the student and practitioner of medicine in the treatment of disease, and it is mainly therapeutic in scope. While the materia medica has not been sacrificed, it is set forth in detail in a concise and at the same time natural arrangement, that presents the subject in such a form that it can be quickly appreciated and easily remembered.

The author attaches particular importance to the plan which he has adopted in the description of the Special Therapeutics, and which consists in systematically tracing the physiological actions and uses of the different drugs in their passage through the body, from their first contact with it locally until they are eliminated in the secretions.

In the part of the Manual devoted to General Therapeutics he has further departed from the ordinary arrangement by discussing the actions and uses of remedies, not under the headings of artificial groups, but of the physiological systems of the body (digestion, respiration, etc.), so as to conduct the student from facts with which he is familiar to the great principles of treatment.

The present edition has been brought up to the latest advances in the knowledge of the uses of the Materia Medica. The section devoted to pharmacodynamics is especially instructive and interesting. It helps the physician in the way of practicing by principles and rules and not by rote—exalting therapeutics as a science as well as an art. While no practitioner

with proper respect for his own intelligence would blindly follow any one, we believe we would be justified in saying that a safer teacher than the author of this work does not to-day offer his precepts to students of medicine.

D. T. S.

The Medical Complications, Accidents, and Sequelæ of Typhoid or Enteric Fever. By HOBART AMORY HARE, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College of Philadelphia; Physician of the Jefferson Medical College Hospital; Laureate of the Medical Society of London, of the Academic Royale de Medicine de Belgique, etc. With a Special Chapter on the Mental Disturbances Following Typhoid Fever. By F. X. DERCUM, M. D., Clinical Professor of Diseases of the Nervous System in the Jefferson Medical College. 286 pp. Price, \$2.40, net. Philadelphia and New York: Lea Brothers & Co. 1899.

Recognizing the fact that in the vast literature of typhoid fever not only have all the typical forms of typhoid fever received exhaustive attention, but that even false notions of the fixity of type have been so fully impressed upon the medical mind as to be productive of confusion and mistake, when cases are met with manifesting something different from what are considered the usual features, the author has devoted this book to such aberrant forms.

And indeed such a book is greatly needed. It was needed sooner to kill off the errors about typho-malarial fever and mountain fever that seemed at one time to threaten to swallow up typhoid fever altogether.

With the pure and penetrating searchlight thrown on the subject by this treatise, the careful physician need be no longer puzzled if he fails to find the hard and fast rules of father-to-son text-books as often violated as observed in his experience with this widely prevalent fever.

Outside of its usefulness as a long-needed guide, the style of presenting the subject makes it one of the most interesting books to read that has been produced in any department of medicine. It is indeed a book that no progressive physician can afford to deny himself.

D. T. S.

Text-Book of Ophthalmology. By ERNEST FUCHS, Professor of Ophthalmology in the University of Vienna. Authorized Translation Revised from the Seventh Enlarged and Improved German Edition. By A. DUANE, M. D., Assistant Surgeon, Ophthalmic and Aural Institute, New York. With two hundred and seventy-seven illustrations. Second American edition. 860 pp. New York: D. Appleton & Co. 1899.

As stated by the translator in the prefaces, five German editions of this book have been issued since the first edition of the translation was issued in this country. Each of them has been characterized by the addition of important new matter and by the thorough revision of the old. This is particularly the case with the last or seventh edition, which, in addition to the merits of lucidity, judicious treatment of the subject, and excellence of proportion and balance that have always characterized Prof. Fuch's treatise, bears everywhere the marks of the most thorough revision, of additions

and corrections, bringing the book up to date in all its parts, so that it presents an excellent summary of ophthalmological science as we know it to-day.

The most marked changes are met with in the sections on functional examination, the pathology of corneal and conjunctival diseases, and the diseases of the fundus. The translator has thought proper to insert two new sections, one upon heterophoria and one upon the use of homatropine and the other cycloplegics, and the general subject of the correction of refractive errors. Added to these excellencies cited by the translator, it remains to be said that he himself has performed his task superbly by turning the German text into smooth, flowing, and expressive English. In looking over the list of delicate operations about the eye, it seems that there is scarcely one of them that is not due to German patience and ingenuity, one or all of the leading methods in each case being named for some German operator.

The letter-press as well as the illustrations complete the excellencies of the book, which assure for it an improvement on the high position and great usefulness of the former edition.

D. T. S.

SOME OBSCURE CASES OF FOOD POISONING.—A danger to which at times the community is exposed, and for which, in some instances, it is difficult to suggest a remedy, is well exemplified in some cases of food poisoning reported to the Local Government Board by the medical officer of health of the borough of Crewe. The *fons et origo mali* appears to have been in each instance pressed pigs' cheek, which was obtained at a pork butcher's shop. There was nothing in regard to the taste and appearance of the cheek which could arouse suspicion, and one consumer even stated that it "tasted splendid." Further, there is no reason for thinking that the other articles of food partaken with it, such as tea, milk, sugar, bread, mustard, and salt could have produced toxic symptoms. The symptoms were chiefly intense abdominal pain, retching, and purging. In some instances sleepiness was a marked symptom, as was also dizziness. It is clear that a portion only of the food was infective, since but a few of those who partook of the food were poisoned in the manner indicated. Unfortunately, it was impossible to secure any portion of the food, or even any vomited matters or dejecta for examination. The cellar where the food was kept was apparently free from reproach, an inspection satisfying the medical officer of health that in this place there were no visible agencies of infection. The conclusion appears to be that ptomaines or the chemical products of bacterial action were the cause of the mischief. The case affords another lesson, in connection with our remarks last week, on the steps which the Government should take to prevent meat extracts being made from filthy substances such as putrid livers and other offal.—*Lancet*.

THE AMERICAN PRACTITIONER AND NEWS

"*NEC TENUI PENNĀ.*"

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H. A. COTTELL, M. D., Editor.

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This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editor is not responsible for the views of contributors.

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JOHN P. MORTON & COMPANY, Louisville, Ky.

THE MITCHELL (IND.) DISTRICT MEDICAL SOCIETY.

This vigorous medical body which is somewhere near its twentieth birthday will hold its regular summer meeting at West Baden Springs, June 22d and 23d proximo. The President and Secretary are our good friends and whilom classmates, Drs. E. P. Easley and U. S. Hon. With such leadership we venture the prediction that the meeting of 1899 will rival if it does not eclipse the best meeting the Society ever held.

The programme is up to date in scientific and oratorical features, while the entertainment in such a place at such a time will be simply royal.

A warm invitation is extended to the doctors of Kentucky and other States that touch Indiana, and with such inducements the list of visitors must be large.

THE AMERICAN MEDICAL ASSOCIATION.

The American Medical Association will meet at Columbus, Ohio, on June 6th, 7th, and 8th, prox. As the place of the coming meeting is in such close proximity, it may be expected that the Kentucky delegation will be unusually large. A special train will leave Louisville,

Monday, June 5th, at 12:45 P. M., arriving at Columbus at 7:35 P. M. Every thing pertaining to the safety and comfort of the passengers will be carefully attended to. The following from the Journal of the Association will give the delegates some faint notion of the good things in store for them :

Among other plans for the coming meeting of the Association are the following: A reception to the visitors will be given on June 8th at the Columbus Auditorium, to which the members of the Board of Trade and their wives will be invited. Governor Bushnell will give a reception in their honor at the State Capitol. An informal entertainment will be given at the Great Southern, and in addition there will be many receptions in private houses. Mrs. Canfield will have charge of the entertainment of the ladies, and she will be assisted by the members of the Art Association and the Federated Clubs. There will be an entertainment at the Country Club and at the Ohio State University. The badges for the delegates will be of sterling silver, of neat and appropriate design.

The revised assignment of meeting-places is as follows: General Sections, Grand Opera-house; Practice of Medicine, Senate Chamber; Diseases of Children, House of Representatives; Surgery and Anatomy, First Congregational Church; Gynecology and Obstetrics, Y. M. C. A. Auditorium; Cutaneous Medicine and Surgery, First Congregational Church; Ophthalmology, Y. M. C. A.; Laryngology and Otology, Y. M. C. A.; Neurology and Medical Jurisprudence, First Presbyterian Church; State Medicine, Stomatology, committee-rooms State House; Physiology and Dietetics, committee-room Board of Trade; Materia Medica, Pharmacy, and Therapeutics, council chamber, City Hall.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

This great Society, which in size and scientific and social influence is a fair rival of the American Medical Association, will hold its next meeting in Chicago.

The date of this meeting has, in the wisdom of the Executive Committee, been changed, as explained by the following letter from the Secretary:

LOUISVILLE, Ky., April 11, 1899.

DEAR SIR: The Executive Committee and the Committee of Arrangements of the Association have changed the date of the next meeting in Chicago, from September 12th to 15th to October 3d to 6th, inclusive.

The autumn fete, to be known as the American Festival, will be held in Chicago, beginning September 25th and ending October 9th with the

laying of the corner-stone of the Federal Building, when the President and the Cabinet will be in the city. During this time the railroad fare to Chicago from all points will be a flat one-fare rate for the round trip, without the necessity of certificates or signatures. The limit of the tickets is so long that a protracted stay can be made in Chicago in order to take advantage of the clinical facilities of the meeting, as well as enjoy the added attractions of the festival.

It is earnestly hoped that this change of date will meet the approval of the members of the Association, and that the next meeting will be the largest in its history.

Very truly yours,

HENRY E. TULEY, *Secretary.*

We trust that the Secretary's earnest hope is a prophecy of certain fulfillment. Let every member resolve to make it so.

Notes and Queries.

DEATH AT THE AGE OF ONE HUNDRED AND EIGHT.—Patrick Haggerty died near Malone, N. Y., at an unusual age. Mr. Haggerty had the good luck to be born on St. Patrick's day, and if he had lived until March 17th would have completed his one hundred and ninth year.

INCREASE OF MEDICAL PRACTITIONERS IN FRANCE.—According to statistics just published the number of medical practitioners in France in 1899 already amounts to 17,735, as against 15,984 in 1898, showing a decidedly formidable increase of 1,751. In Paris there are sixty-two more doctors than last year, in Lyons there are fifty-seven, and a proportionate increase is reported from several other large towns; and the cry is, still they come!—*British Medical Journal.*

MALE BIRTHS INCREASING.—The statistics of the Health Department show that there has of late been a marked increase in the relative number of male births, but whether this is due to the influence of the recent war must be left to conjecture. During the last two days of October and the thirty days of November there were 2,055 male births and 1,896 female births reported, and in the first seventeen days of December, 1,259 male births and 1,158 female births in the Boroughs of Manhattan and the Bronx. This is a ratio of 53 boys to 47 girls, while the normal ratio is 51 boys to 49 girls.—*Boston Medical and Surgical Journal.*

ABORTEFACIENT NOSTRUMS.—The recent attempt to blackmail women in England for purchasing advertised abortefacient nostrums has set our energetic contemporary the Lancet at work on another investigation commission. The issue for December 17th contains the details of its "critical

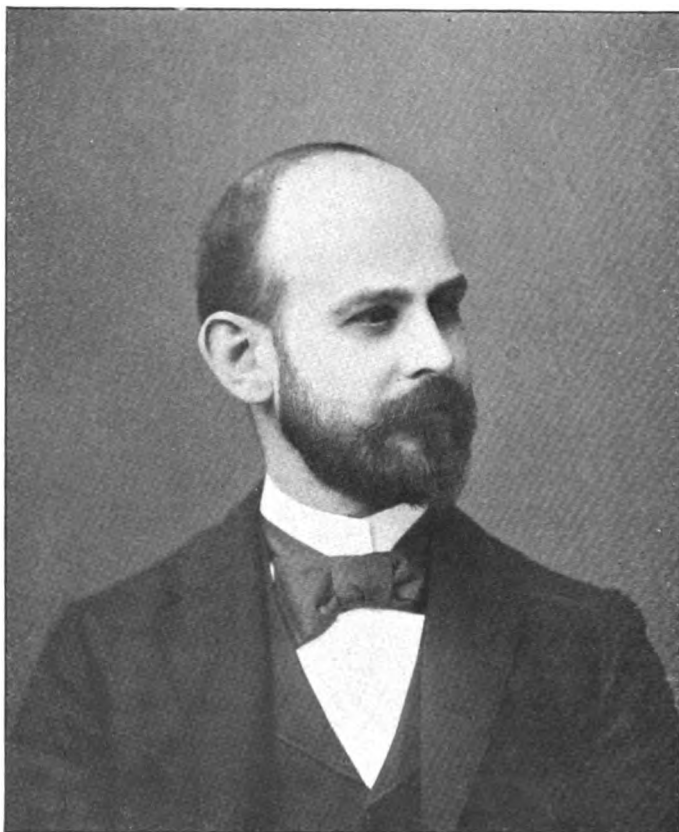
and analytical inquiry" into two of these nostrums. In the first, savaire appeared to be the active constituent of the pills, while in the second case the results of the examination suggested that the liquid was senna and rue tea.

The letters from the Lancet to purchase the nostrums were so written as to leave no possible doubt in the vender's mind that the purpose for which the purchase was being made was the induction of abortion. The Lancet says: "If any one should find in our conduct here matter for unfavorable comment on the ground that we have tempted Mr. Thomas Ottey to sin, we have to say that we find in him so willing an accomplice that we can hardly have been his seducers, and, secondly, that it is useless to fight a certain sort of stink with rose water."—*New York Medical Journal*.

LAWYERS' FEES AND DOCTORS' FEES.—The Medical News for December 24th in an editorial comments on the case of a distinguished New York lawyer who had received a \$5,000 fee and forgotten all about it, as follows:

No one, we are sure, has the slightest doubt that the distinguished lawyer who denied absolutely having received the aforesaid fee, though it was afterward clearly proved that he had received it, was eminently sincere in his denial. It would simply seem that \$5,000 fees are such common occurrences in a great lawyer's everyday life that he can not reasonably be expected to recall their receipt with absolute assurance if any considerable time has elapsed since the event, or if he happens to have been at the moment of its presentation so busy with other or more important matters as not to have made an act of reflex consciousness and so impressed the trifle on his memory.

But why is it, then, that when the question of doctors' fees gets into court lawyers always insist on their excessiveness? One might think that the generous fees they collect themselves would make them realize that the value of the work of a liberal profession can not be estimated by any cut-and-dried rules of trade, or commercial deductions as to the value of time. The value of a service in law depends upon the worth of it to the party for whom it is performed, and the following out of exactly the same steps of legal procedure has a very variable fee for its reward according to the circumstances of the client for whom it is done. Why the same rule should not hold for the services of a physician does not seem very clear. But the attempt to put such a principle into action by the doctor brings down upon him, in case of legal complications, the malediction of judge and lawyer, and almost inevitably leads to the extremely unpleasant predicament of having to accept a fee made more or less arbitrarily smaller by the court. We humbly submit that all this seems scarcely in accordance with the American spirit of fairness or with the high principles of equity our legal brethren laud so justly. Let us hope that this little public reminder that "there are others" will give them a fellow feeling that will make them wondrous kind to the little seeming exaggerations that their brothers of the healing art may commit in the making out of bills.—*Ibid*.



DAVID BARROW, M. D.

THE AMERICAN PRACTITIONER AND NEWS.

"*NEC TENUI PENNÂ.*"

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NO. II.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

PRESIDENT'S ADDRESS.*

BY DAVID BARROW, M. D.

Ladies and Gentlemen: Must I apologize for choosing for my subject to-night, Recreation and Rest? True, I can not expect to present a single new thought, but hope by going over familiar ground and emphasizing known facts to accomplish a little good.

The American citizen, as you know, is active, capable of great exertion, and lives under high pressure, rarely considering his own health, and always bent upon accomplishing quickly what should require great time. The cares and worries of life are many at best, and must cause the young to become prematurely old, the robust to become delicate, the young wife a careworn wreck, the active business man a crabbed old fellow, unless tempered with judgment in regarding nature's laws and living as she demands. Disregard nature, be unreasonable in life, burn the candle at both ends, and care not for her warning, and surely you will be held responsible and must pay the penalty. What that penalty is no one knows better than the physician, for how often do the following pictures present: It may be the business man, who, after years of unrelenting labor, comes with the statement that he has not been absent from the store in a year, that when not at the store his business was constantly with him in thought, that he had discussed it with his wife, that he had lain awake at nights thinking about it, that he had really been successful and had made money; but

*Delivered at the forty-fourth annual meeting of the Kentucky State Medical Society, at Louisville, May, 1899.

says he: Doctor, I have become nervous, my appetite is poor, I sleep badly, I take but little interest in the ordinary things of life. I am irritable, cross with the children, and can not bear to have them noisy, and am often impatient at home. That man is miserable, his money does not soothe him, those children and that wife can not make him happy. He is paying the penalty of business dissipation and excess, and has gone on unreasonably taxing nature, and has failed to take that recreation and rest so essential in the preservation of health. To restore him to health requires much time; he must rest, be free of business cares, and have something introduced into his life that will change his thoughts from the old channel. Had the danger signal been seen earlier, treatment would have been easier, cure more speedy and certain. Had nature been regarded and not abused, had that man taken the necessary recreation and rest, by occasionally hunting or fishing, or in some other way, there would have probably been no necessity of treatment, for he would have continued well. This is a picture very common and recognized by all physicians.

The next is equally familiar, and to me intensely distressing; it first shows the bright, happy, and hopeful young woman, but little pain has been her lot, her past is a sweet recollection, and the future promises only joy. In robust health, loved by mother, father, sister, and brother, her capacity for the enjoyment of life has been great.

Then the picture changes. She is the young wife, still healthy and happy, and in the future nothing but contentment is discerned. Then another change. Ten years have gone by, the mother sits with the little ones around her, perhaps; the plump and rosy cheeks are now thin and pale, she is slight in figure, nervousness marks her every movement, she is careworn, prematurely old at thirty. Ten years of constant care; the little ones were nursed through illnesses, small and great; day after day her life has gone on without change, many vexations have come upon her, yet there has been but little recreation and no rest. Nature has yielded, the exactions were too great, and ten years have made the impression that thirty should. Sad indeed is this picture to contemplate, but, nevertheless, too often is it a copy from life. Had that young woman been diverted, had she had some one to lighten her burden, some one to make her evenings pleasant, to relieve her of care, to give her a trip, to let her have some rest, how much more pleasing might the picture have been.

Let me draw still another picture. Let it be of the society woman, for she can dissipate in her way fully as well as the business man can in his, and the consequences will be equally as serious. Her social nature will at first suggest an afternoon tea, a game of whist, an occasional theater party, all of which is well and conducive to health, in moderation, but often there comes into her life social ambitions, so to speak; a desire to excel and outdo Mrs. A. or B., and from innocent diversion and recreation she soon becomes absorbed and lost in a life of excess and dissipation. Night after night, day after day does the pressure continue. I quote from Robert Grant: "Her nerves are kept in a constant state of tension by breathless comings and goings, her digestion perpetually tried by the viands of festivities." She presently becomes a wreck, mentally and physically, though she presents a bold front to the world, until one day the news is flashed upon a busy public that she has died suddenly from "heart failure, following an attack of pneumonia." This woman with much to live for, with a kind husband and sweet children, with plenty of money, has destroyed herself, and has allowed her social ambitions to wreck her life; what should have been recreation, what should have diverted and made life pleasant, what should have aided in helping to reach the allotted three score and ten was made an evil by excess and dissipation, and caused an early surrender to the inevitable. So could other pictures be presented, but the ones drawn will serve my purpose, and are so common that all of us must recognize them. Any long-continued or unreasonable tax, especially upon the nervous system, must cause disaster by injury to health, unless we remember that the strain must be relieved by occasionally taking rest, or by frequent indulgence in some form of recreation.

What is sadder than to watch the melancholy, to see some one sensible though nervous person look at a life in such an abnormal way, to believe the blessings given are but sorrows, and even to see such go on until life becomes unendurable, and at some depressed moment end the miserable existence by self-destruction! Few of us realize how insidiously the breakdown comes, and are not willing to admit that there is danger to himself, and will go on for months and even years until some organic disease is engrafted and the rest comes too late to be of benefit. If the best good is to be derived, the rest and recreation must come before the organic changes have occurred, and the thought of prevention rather than cure should be uppermost in

the mind. The proper rest and recreation can be had in many ways, even for those in moderate means, and if the physician will appreciate and preach their necessity, applying to himself and his patients the danger of neglect, much good will be accomplished. True, the stamina of all differ; some require much rest, some but little. The man that uses his brain rather than muscle, the student, the scholar, the professional man needs rest more frequently than the phlegmatic or man who earns his livelihood by manual labor. The latter will often year after year under great physical exertion keep in good health, if his mind can be kept at rest, and the old age reached by many of them is a common observation. That seventh day given to all as a day of rest is appreciated by the manual laborer, and usually he will spend it in such a way as to attain that end; but with most professional men, especially with the physician, work goes on without interruption, and the rest never comes unless an earnest effort is made to have it. How difficult it is to follow this advice, no one appreciates better than I. How hard it is to get away, what loss will be involved, and many other thoughts come into his mind, and the effort seems insurmountable; but upon the other side, we see the health giving way, mentally and physically, invalidism ahead, so the rest is decided upon. Probably a trip is taken, if not too long deferred; the object is attained, restoration to health, and that often means happiness. But how prone are we to procrastinate until too late, the disease is established, and the trip can do but temporary if any good.

Let me here touch upon two conditions very common and terribly disastrous, if not recognized early and treatment instituted. Tuberculosis is the one, and functional nervous disturbances is the other. These, of all others, must be early recognized, anticipated if possible, and they often can be, and rest and recreation instituted in time. A recent trip to the West, where I met many invalids, emphasized with me the necessity of early effort, if good is to be accomplished. There I saw the so-called "one lungers" going from place to place, from high to low altitudes, from seashore to inland; cheeks flushed, eyes bright from hectic fever, form emaciated, respiration difficult, cough frequent, yet was he hopeful that improvement and even cure would result. How cruel must be the opinion given, how crushing when the dawn unfolds to him that nothing can be done, that his rest was taken too late, and he must go home to die, or perhaps he dies in the strange land, as I saw one do, with no loved one around him, with

no one to close with gentle touch and tender affection the lids once covering those once bright and responsive eyes. Sad, heart-rendering indeed is it to see these desperate people, wandering in search of health, sent by the physician, when he should have known that such advice was given too late, that had it been given a year sooner, cure might have been effected; but now organic changes have occurred, the disease has progressed too far, death must soon come, and kinder would it have been had he been left at home to die. Then how important it becomes to study well the pre-tubercular state, the condition that precedes consumption, that we may recognize the danger and give the proper advice at the proper time. That this condition ought to be more often recognized there is no doubt, and that it is not should stimulate the medical profession to greater effort. Consumption is responsible for one-fifth of the deaths that occur throughout the globe, and in the United States nearly five hundred die every twenty-four hours. Only since 1882 has the cause of consumption been known, Koch then announcing the discovery of the tubercle bacillus, and in many ways have our opinions changed relative to this fatal disease. We must realize that practically the tubercle bacillus is omnipresent; we meet it everywhere, in the home of the rich, in the hovel of the poor, in public places, in the city, and also in the rural district. So all must encounter and battle with this germ, and if weak and run down in general health, the tissues lack resistive power, the invasion is successful, and destruction will ensue, its rapidity depending upon many circumstances.

Any deterioration of health must be promptly investigated; never put off with the idea that things will soon be righted, and no effort will be required to get well. The health does not run down unless there is a cause; whether that be in the mode of life or the beginning of some organic disease will often require careful and patient investigation. The tubercle bacillus does not multiply in and destroy the lung of a healthy man; the soil must be favorable for its growth, and let me repeat that any thing that depresses the vitality aids in creating a culture bed, not alone for this one but for other germs. The organic lesion in consumption is usually preceded by more or less definite symptoms, but too often they are not heeded. The slight cough, the evening temperature, the too frequent pulse, the slight loss of weight, with an appearance of weakness, should, considered singly or collectively, cause anxiety, and every means known should be resorted to promptly that

the true condition may be recognized. The microscope will often enable us to make an early diagnosis in pulmonary tuberculosis, usually before an examination of the chest reveals any deviation from the normal, so this valuable instrument must be used early and often when the slightest suspicion of tuberculosis exists. The physician should listen to and weigh carefully the symptoms presented by every patient, though they may at first glance seem trivial, though he may be hurried, feel tired or worried, and disinclined to listen to a long recital; yet to listen is his duty, and the information received will often enable him to make an early diagnosis. And the patient should early seek the physician and have himself investigated and the meaning of all symptoms understood.

Let me now direct your attention briefly to the nervous system. How nervous most people are is well known, and that it is rare to find a well-balanced nervous system is true, the deviation from the normal being little or much. That the mode of life, that the worries encountered in the struggle for supremacy, that the hurried way we have of performing all duties are largely the cause for the many nervous people that exist

When a mother becomes unreasonable and harsh with her child, when a wife is suspicious and exacting of her husband, when a husband is cross with his wife, and when they are together suspicious of neighbors and friends and look at things in general in a perverted way, there is surely sufficient evidence that something is wrong, and that something must be done to prevent further progress in the abnormal direction. If the lives of these people be analyzed, you will find that there is somewhere a strain, physical or mental; somewhere the exactions of life have been too great, no attention has been paid to rest, and the evenings of recreation have been too few to remember. True it is that there are many cranks, and that they will always be more or less cranky there is no denying, but even these unfortunate people can be made happier and less annoying to other people if the general health is kept up by yielding to nature's laws. If they have instilled into their lives some pleasure, the necessary rest be taken, they will be less cranky and often lose in large part their crankiness. We all know how dependent, one upon the other, are the physical and mental systems. That the greatest good must come when due attention is paid to both. A healthy body usually means a healthy mind, and an unhealthy body often leads to mental decay, although we do sometimes see great minds in bodies

that seem inadequate. Sterne, in *Tristram Shandy*, says: "A man's body and his mind are exactly like a jerkin and a jerkin's lining; rumple the one, you rumple the other." So it is the mind and body are mutually dependent; tax to excess either, and both must suffer; so both must have rest, and the mind, in addition, its necessary recreation. Jordan tells us, "Hurry is the scourge of America." "Hurry means the breakdown of the nerves." "It is the royal road to nervous prostration."

Nervous prostration is a popular malady, and the cases are frequent; the children, the old people, in fact, everybody seems liable to have this disease. It is usually caused by long-continued strain, is met with more often in girls and women, and its treatment is exceedingly tedious and unsatisfactory in the hands of the general doctor. Rest is essential in its management, whether by means of the so-called rest-cure treatment or in some other way, but at best the cases are trying to all concerned, to the doctor as well as to the family and friends.

The physician is about the hardest worked man I know of, and he often refuses to take rest for fear that he may lose practice, that some physician will be called in and continue as the physician of his former patients, even after his return to work. So he holds on, trying to keep up until his nervous system is shattered; he then too often resorts to stimulation, of one kind or another, that he may stand the pressure and exactions of his life; finally he must yield, and becomes a mental and physical wreck. Every physician should take rest and recreation, a month every year and two months if necessary; and he owes this to his patients as well as to himself and family. If he be nervous and in poor health, he can not render good service; he can not correctly weigh the evidence and exert the keen discrimination that is so necessary in the successful practice of medicine. How differently does he feel when rested and well, how pleasant to minister to those in need, to sympathize with those that need sympathy, to encourage those that need encouragement! How much better service can he render when the mind is healthy and bright, when enthusiasm aids in the performance of his routine duties! The surgeon certainly operates better and is more helpful by words of encouragement after his vacation, an observation not only made by himself but by his patients and patients' friends. - Then admitting that rest and recreation are so essential to us all, as well in health as in disease, it becomes the duty of physicians to emphasize the truth and to point out as best they can what they are,

and how rest and recreation can be obtained. Rest and recreation, and they are as twins, mean generally relaxation, mean the dismissal of unpleasant thoughts and the acceptance of pleasant ones; mean change from the routine life to something that attracts and interests; may mean change from one labor to another, from the scenery of the plain to that of the mountain, from the land to the sea; they mean the cultivation of cheerfulness and the weighing of all things in the balance of the philosopher; the necessary hours of sleep and the proper exercise of the body and mind.

Rest is not quitting
The busy career;
Rest is the fitting
Of self to one's sphere.
'Tis the brook's motion,
Clear without strife,
Fleeting to ocean
After this life.
'Tis loving and serving
The highest and best;
'Tis onward unswerving,
And this is true rest.

Rest for one may be unrest for another, so the rest of every man must be a study. The temperament and natural bent of all must be considered. Some of us like the theater, some believe it sinful; some are soothed by music, others are made nervous; some are rested by outdoor life, others by living indoors, and so on. Thus it is impossible for us all to obtain rest in the same way. With the person in affluent circumstances the problem is not difficult; he can travel, indulge in much that money can supply. With the majority of people, however, those who must work to live, those whose incomes only yield an amount sufficient to furnish the necessities, the problem of securing recreation and rest is more difficult. But even here if their necessity be appreciated much will be accomplished. A poor man can cultivate and form cheerful friendships, he can carry to and receive from his own fireside cheerfulness and happiness, he can stroll with his wife and babe into the park and woodland, cultivate and enjoy the beauties of nature, forgetting the cares of his everyday life, and often gain recreation and rest by the creation of pleasant impressions. Worry and irritation cause unrest and must be eliminated, in part or at times, that rest may be secured. Recreation can be had without great expenditure: An evening at the theater or opera, something to cause forgetfulness of self,

something to laugh at; so pleasant, so refreshing, a tonic to the mind and a reflex help to the body. How much happier one feels after an evening with Jefferson or Goodwin, or Sol Smith Russell. If a lover of music, how delightful to be wooed by Apollo, and to listen, enraptured, with cares and worries cast to the winds, and drink in the sweet notes vibrating from lyre or cithara, or to listen to Patti or Gerster, and to drink in the exquisite notes, enchanted, but lost to the world and every care about us.

To the busy man a good book will afford recreation and give a healthful stimulus to the mind; an hour with Dickens or Irving will enable one to forget the routine daily life, will give pleasure and do good. With the good public schools found in almost every community, with the public libraries to be had in the large and small cities, with the cheapness of books, magazines, and newspapers, there can be no reason why even the poor can not enjoy the recreation and rest that come from judicious reading. When business cares bear upon us most heavily, when the friction of life is greatest, when the trials are hard to withstand, when the grind for existence must, apparently, keep the shoulder at the wheel, then it is I beg of you to heed the warning, take the rest, no matter what difficulties are encountered; a few weeks well spent may save much time in the end. We must not forget that happiness, contentment, and rest come from doing good, aiding somebody, doing to others as you would be done by; no contentment is greater, nothing is so satisfactory as to know a duty has been well performed, good has been accomplished, somebody has been made happier. Take this from the physician's life, and there can be but little left; to be kind, to attend the sick, to use every effort for the patient's restoration, is simply a duty; but how comforting, how restful is it always to accomplish something and feel that your efforts have helped, and then how delightful when appreciation is shown, and with tears of gladness in her eyes and love in her voice, the wife or daughter comes to thank you for saving the one so dearly loved. What recompense so great, what rest so complete, what tonic so invigorating as the words of that wife or daughter. When the clouds lower, when every thing is dark, and no brightness can be seen ahead, when life's burden seems about to overwhelm us, the layman and the physician can have some respite by recalling the good deeds performed, and nothing can help more in the battle with the future than the rest gained from such healthful meditation.

LEXINGTON, KY.

INDICATIONS FOR ENUCLEATION.*

BY T. C. EVANS, M. D.

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In spite of the fact that almost every text-book gives a list of indications and contra-indications for enucleation, the surgeon is many times sorely perplexed to know what course to pursue; whether to resort at once to the radical measure of enucleation, thereby practically insuring the integrity of the fellow-eye and avoiding a painful and tedious convalescence, or whether to lean to the conservative side and endeavor by rest and skillful attention to preserve the eye, both for visual and cosmetic purposes, even though the attempt may to some extent jeopardize the vision of the sound eye, and involve a long, painful, and tedious recovery of the diseased one.

Knapp gives the following indications for enucleation (Norris & Oliver's System of Diseases of the Eye):

- (1) In intolerable pain with incurable blindness.
- (2) In pain, inflammation, hemorrhage, photopsia, and other irritative symptoms in chronic irido-cyclitis, glaucoma, phthisis bulbi, etc., in one eye, which is blind, or surely will be blind, irrespective of the other.
- (3) In eyes so extensively injured that a recovery is not to be thought of.
- (4) In intra-ocular malignant gliomas and sarcomas, except when they are small and situated in the iris, so that they can be radically removed.
- (5) In epi-ocular malignant tumors, if they can not be removed without destroying the eye.
- (6) In orbital tumors that threaten life, if it is impossible to remove them without sacrificing the eye.
- (7) In staphyloma and macrophthalmus, if the eye is blind and becomes unsightly and troublesome.
- (8) In panophthalmitis, conditionally.
- (9) In the presence of foreign bodies in the eye that can not be removed, and cause trouble, inflammation, and blindness.
- (10) In traumatic irido-cyclitis, to prevent or cure sympathetic ophthalmia.

* Read before the Louisville Medico-Chirurgical Society, April 21, 1899. For discussion see page 428.

Swanzy (Diseases of the Eye) says the following rules guide me in my own practice:

(1) Although the danger to the second eye practically does not arise until inflammation has been set up in the exciting eye, yet I would perform primary enucleation, evisceration, or Mules' operation on the latter if it had been so injured as to make recovery of sight almost hopeless and the onset of irido-cyclitis almost certain.

(2) I would enucleate in the same case were irido-cyclitis already set up in the injured eye.

(3) I would enucleate in a case of irido-cyclitis where a foreign body which could not be safely extracted was present in the eye, even though the vision were fairly good, because we know that the danger of sympathetic ophthalmitis amounts almost to a certainty.

(4) I would enucleate in a case of acute irido-cyclitis, traumatic or idiopathic, where vision was lost, especially if the eye were tender on pressure, for here the eyeball is useless and disfiguring, and apt to be a source of danger to its fellow.

(5) I would enucleate in a case of phthisis bulbi, even of old standing, where there was shrinking and pain on pressure.

(6) I would enucleate in a case where the sympathizing eye is already affected, provided vision in the exciting eye be lost and the hopes of its recovery but slight, if any, for improvement in the sympathizing eye, for a greater amenability of it to treatment has been frequently observed after this has been done.

(7) I would enucleate in a case of sympathetic irritation if the sight of the exciting eye were very defective and the neurosis very persistent.

(a) I would not remove any injured eye unless it contained a foreign body which I could not extract if its sight were fairly good and as yet no sign of inflammation present, for inflammation may not come on, and the eye may possibly be saved.

(b) I would not enucleate the exciting eye if sympathetic ophthalmitis has already appeared, should the vision of the exciting eye be fairly good, for it often occurs that the process in the sympathizing eye is not arrested by the proceeding, and that when the latter is not undertaken the exciting eye turns out in the end to be the better organ, with better vision. Many other authors give substantially the same rules and indications.

Simple as these indications seem, I have often experienced the greatest difficulty in determining whether or not an injury was of such

a character as to demand a primary enucleation. In other words, I frequently see cases where it is impossible for me to say whether or not the injury will almost certainly result in permanent and total blindness, or that any given injury will surely be followed by an irido-cyclitis.

Neither is it always easy to say whether or not a foreign body is present in the eye. While primary enucleation is in many respects preferable to the secondary, in so far as the operation itself is concerned, this should not be allowed to weigh against even a slight hope of preserving the injured eye. I believe that altogether too many primary enucleations are done, and that this lack of conservatism must sacrifice at least some useful eyes. Primary enucleations should be limited to those cases known to contain a foreign body that can not be extracted, and to extensive laceration of the globe.

The eye is much more tolerant of injuries than is generally supposed; often exhibits wonderful reparative powers, and its wounds are not prone to infection if treated with even ordinary care. Sympathetic ophthalmia is the thing to be feared in all wounds of the iris and ciliary body, but as this does not develop for three weeks at least after the injury, there is ample time to wait and see what rest and attention will do, and still enucleate in time for prophylactic purposes. Moreover, I believe the exciting eye, if closely watched, as a rule gives sufficient and timely warning of the approaching danger to the other eye, and furnishes us with the indication for its enucleation.

LOUISVILLE.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, April 21, 1899, Frank C. Wilson, M. D., President pro tem.,
in the Chair.

Operations for Pelvic Disease. Dr. Turner Anderson: Case 1. The first specimen is one that shows how difficult it is to diagnosticate pelvic troubles prior to the operation. This little specimen was removed on the tenth day of April, 1899, from a patient in Jeffersonville, Ind. I was asked to operate, the diagnosis having been made of retroversion of the uterus, and it was thought that perhaps a ventral suspension would be the best method of dealing with the case. The patient was

*Stenographically reported for this journal by C. C. Mapes. Louisville, Ky.

twenty-nine years of age, and had suffered for more than ten years from pain in the pelvic region and dysmenorrhea. She had never been pregnant, having been sterile during the entire period of her married life.

Upon making a vaginal examination I concurred in the diagnosis, that there was a retroversion of the uterus with fixation, and I believed that ventral suspension would probably be the most satisfactory operation.

Upon opening the abdomen, to my surprise an ovarian cystoma about the size of an ordinary orange came at once into view. It was apparently an ordinary cystoma of the right ovary. I found, as had been diagnosed, that there was retroversion with fixation of the uterus, and the left ovary had been dragged down with the uterus, and was imprisoned between the bowel and the uterus. The right ovary with this cyst was practically free and was easily removed. The left ovary was adherent to the posterior surface of the uterus, the fimbriated extremity of the tube had been incroached upon and was occluded; the ovary was detached and removed with some difficulty. The patient was gotten off the table in a very satisfactory condition, and I did not see her for a week after the operation, when it was found that union had been complete, and the woman made a perfect recovery.

Case 2. The second case is one that was operated upon last Friday at Sts. Mary and Elizabeth Hospital. The patient was a woman sixty-three years of age, who had had exceptionally good health up to the first of January, 1899. She was then attacked with symptoms of biliary calculi, and I was asked to see her in consultation with Dr. McDermott. The doctor had made the diagnosis of gall-stone colic, which I confirmed. The patient recovered from the attack in a reasonably short time, and remained well, getting up and attending to her duties until Wednesday night last, when she was suddenly seized with violent pain in the right hypochondrium, and I was summoned to see her. On Thursday she was no better, and on Friday she was removed to the Sts. Mary and Elizabeth Hospital, and I asked Dr. Roberts to see her in consultation. He also agreed in the diagnosis of gall-stones. I operated upon her, removing the two large biliary calculi which I show you. The patient was very obese. There was not much difficulty in the operation except in consequence of the very fat condition of the patient. She has gone on uninterruptedly without a symptom. The wound has drained nicely, and she is getting well in a very satisfactory way.

Case 3. The third case is one of suppurating ovarian cyst of the right ovary with extensive adhesions, and seemingly a pyosalpinx in connection with it; the tube is dilated and filled with pus. There is also a hydrosalpinx of the left side. This specimen was removed last Saturday morning. The adhesions were very extensive. Upon opening the abdomen this tumor came well into view. Upon plunging a trocar into it, supposing I was simply going to find and liberate some serum, I discovered that I had encountered a suppurating ovarian cystoma. The tumor extended down into the pelvis behind the uterus, crowding it over to the left side, and the adhesions were separated with considerable difficulty. You will see the enormous amount of shreds, etc., where the adhesions were separated. This is the left ovary and tube—the seat of the hydrosalpinx—which was over to the left and behind the uterus, and I fortunately succeeded in taking it out without rupture.

One feature of especial interest in connection with the case is that this patient was well up to the beginning of the present year. At that time she had an attack of what was supposed to be grip, and she was treated in the country for this condition. She finally came to the city and was under the care of Dr. Montgomery, who referred her to me. She had suffered from amenorrhea since the first week in January up to the time of the operation, and at the time of the operation the abdomen was distended to about the size of a six months utero-gestation, rendering a diagnosis quite difficult. After she had been anesthetized I went over the case in a most careful way, and came to the conclusion that it was not a physiological amenorrhea from which she was suffering, and went on with the operation with the result stated. The adhesions were so extensive and so difficult of separation that I found it necessary to drain with gauze covered with rubber tissue. This was removed on the second day. The patient has never had any elevation of temperature or acceleration of pulse since the operation; her bowels moved promptly. The operation was performed last Saturday at 10 o'clock, and I consider her practically well now.

Discussion. Dr. W. O. Roberts: All the cases reported by Dr. Anderson are exceedingly interesting. I had the pleasure of assisting him in one of the operations, the gall-stone case. Before the operation I was certain that it was a case of gall-stones, with most likely a rupture of the gall-bladder. When the abdomen was opened there was quite a

flow of fluid, which I believed to be bile. After this passed out he found the omentum very much thickened and adherent to the anterior border of the liver, completely concealing the gall-bladder, so much so that it was necessary to separate and remove a considerable portion of the omentum before the gall-bladder could be well exposed. Then the gall-stones could be very easily felt. The gall-bladder contained very little fluid, and no rupture was found.

Dr. J. A. Ouchterlony: The gall-stone case interests me very much. I had the pleasure of seeing the patient a few days ago, and noted her excellent condition; there was no elevation of temperature, and her general condition was good; furthermore, there was a free flow of bile through the drainage tube. These cases are interesting from a double standpoint, both medical and surgical. The presence of these two large calculi gave rise to a great deal of pain, but there were only two, and there must have been a great deal of cholecystitis, as a large quantity of fluid escaped at the time of the operation, and I would like to know what was the condition, not only of the gall-bladder, but of the duct leading from the gall-bladder. It happens very often that there is occlusion of the cystic duct in consequence of the presence of calculi, and when that happens then we have an enlargement of the gall-bladder from the accumulation of morbid fluid. The symptomatology of these cases is often exceedingly puzzling, and it reminds me of what a gentleman said to a patient of mine concerning tapeworm. He said that whenever he came across a case of protracted dyspepsia he made up his mind to look for tapeworm, and whenever one comes across a case of protracted trouble in the right hypochondrium, especially if there is jaundice, it seems to me that you can always count upon its being a good plan to turn the case over to the surgeon and have an exploratory operation performed. The number of cases in which surgery has achieved speedy cure, where often the symptoms hardly warranted any thing but a suspicion of gall-stones, is growing very large indeed.

Dr. Turner Anderson: I reported the cases very briefly for the reason that we have so many pathological specimens before this Society that I did not consider it wise or necessary to go into the cases in an exhaustive way.

In regard to the points referred to by Dr. Ouchterlony, there was not a great deal of retained fluid in the gall-bladder. I do not believe the gall-bladder had ruptured. As soon as the incision was made into

the peritoneal cavity, as soon as we separated the gastro-hepatic omentum sufficiently from the lower surface of the liver, we had an active hemorrhage, and there was a considerable discharge of fluid at that time, and it was necessary to stop the operation until I could rapidly pass a mattress suture around quite a portion of the liver and tie it. The gall-bladder was not very much distended, and when it was opened there was no very excessive gush of fluid; it was not found necessary to aspirate the gall-bladder in order to relieve the fluid. The symptoms pointed to quite an active inflammatory process. The patient four months before had suffered an acute attack, which had subsided under the administration of laxatives, rest and opium. When I first saw this patient in a recurring attack, she had been taking quite freely of papine. At the time Dr. Roberts saw her on the evening of the operation her pulse was rapid, and she had some symptoms of rupture, but I felt quite confident that there had not been a rupture of the gall-bladder. There was no evidence of this, so far as an examination of the viscus was concerned.

Large Uterine Fibroid. Dr. Louis Frank: The following case is interesting from several standpoints. This specimen—a fibroid tumor of the uterus—was removed Wednesday morning last from a patient twenty-six years of age, a negress, sent me by Dr. Holloway. The tumor is a very large one; it filled the entire abdominal cavity, reaching up to the sternum, and also filled the pelvis completely. A great deal of difficulty was experienced in separating and ligating the broad ligaments, on account of the fact that the tumor had unfolded these ligaments, extending far over to the left side, displacing the uterus so that the cervix could hardly be felt. In fact, we found it necessary to remove the larger portion of the tumor before the ligatures could be applied to the uterine arteries. After the greater portion of the tumor had been taken away, a neoud was thrown around it, these vessels were reached, and the entire cervix was removed, doing a complete extirpation. We found that the omentum, a part of which is attached, the vessels of which are very large, presented some venous sinuses as large as my thumb, containing a great deal of blood. In the folds of the omentum there was also an effusion of fluid, there being quite a number of sacs which contained from four to eight ounces of serum. The operation was completed entirely satisfactorily, notwithstanding it was a very difficult undertaking, all vessels tied, hemostasis being com-

plete; the vagina was closed by catgut sutures, a drain being carried out from the raw surface that was left above through the vagina below.

The patient did very well for the first eighteen or nineteen hours after the operation, her pulse during this time not being more than eighty. The operation was performed on Wednesday morning, and on Thursday afternoon about five o'clock the pulse began to go up, and by six o'clock it had reached 140, and shortly afterward it became imperceptible at the wrist. At seven o'clock I was called by the nurse, and hurriedly went to see the patient. She was found almost pulseless, but her mentality was perfectly clear; no shock; temperature 99° F. I felt confident, however, that bleeding was going on, and rapidly opened the lower angle of the incision, which had been quite an extensive one, and found that the ligature, which had been applied to the ovarian artery on one side, had slipped, leaving the entire broad ligament open, from which a great deal of hemorrhage had taken place, filling up the pelvis; it had already clotted, and I moved from the pelvis about a pint and a half of solid clots. There was some serum and some fluid blood in the cavity, and I take it the patient had bled at least three pints into the belly. There had been quite an escape of blood during this time from the vagina along the gauze, this blood being of a dark color, which had saturated the dressings and also the pads. The vessel from which the bleeding had occurred was found after some search; it was clamped with forceps and again ligated, and normal saline solution was injected under the skin; some was also left in the cavity, and a high enema was given of the same solution. In a short time the pulse again became perceptible, and I thought the patient would rally, but she died one and a half hours afterward.

I report this case not only from the fact of having had a slipped ligature, an accident which may occur to any of us, but also on account of the age of the patient, the large fibroid having occurred in a woman twenty-six years old, it being rather unusual to find this character of tumor in a patient this young, and also the difficulty which was encountered in placing the ligatures on account of the unfolding of the broad ligaments as mentioned.

Discussion. Dr. A. M. Cartledge: It is such reports as this which are the most instructive, because one of the greatest dangers of hysterectomy is hemorrhage. A great many patients have been buried with the abdomen filled with blood following this operation from slipping of the

ligature. I expect that I have had some cases of this kind, and this leads me to say that it has been my custom in doing an hysterectomy in the last two years to take all of the vessels and ligate them with chromacized catgut from end to end, after putting on a silk ligature in the usual way. It only takes five or six minutes longer, and I think the time is well spent. The uterus having been removed and the vessels tied in the usual way, before putting in a running stitch to close up the raw surfaces we can rapidly go down and pick up the vessels and tie them with No. 1 chromacized catgut for fear that the ligature previously applied may slip. This affords a security which we owe to the patient. When we remove a tumor like this from the uterus the vessels are so enlarged as a result of the growth of the tumor that I think five or six minutes spent in putting on the extra ligatures should be considered as time well utilized. I have long been impressed with the danger of the ligatures slipping. It must be remembered that in this operation there are four large vessels to be tied, the uterine and ovarian arteries, and the danger of a ligature slipping is very positive, especially when we come out close to the pelvic brim. Again, by the time the operator has succeeded in getting out a tumor as large as this he is tired and worn out, and his muscular strength is impaired, and I think five minutes expended in running over all the stumps is time well spent.

Dr. T. S. Bullock: I am glad Dr. Frank reported this case. I agree with Dr. Cartledge that these are the cases from which those of us who are doing this kind of work derive a great deal of benefit. Reports of our failures require a considerable and somewhat unusual amount of courage, and I am glad to see a beginning in this direction. I have no doubt that many patients after hysterectomy have been buried with the belly full of blood, and I would not be surprised if I had been a *particeps criminis* myself.

Dr. Turner Anderson: In line with what Dr. Cartledge has said in regard to this case, I had the pleasure of seeing one of the most distinguished operators in this country remove a fibroid tumor with a considerable amount of difficulty several years ago. He retired from the field of the operation as soon as the tumor had been gotten out of the way and took his seat at the table, and his assistant took charge of the remainder of the work. He turned to the surgeon and said he thought there was a considerable amount of hemorrhage; the surgeon replied that he did not think it amounted to any thing, that it was nothing

more than a parenchymatous oozing, to go on and complete the work. It was but a little while before the abdomen was filled with blood, and some was dropping to the floor beneath the operating-table. The surgeon immediately ran to the case, the sweat began to pour off his face, the stitches were quickly removed, and he began with the left side of the abdomen, as he said afterward was his custom, to read all of his ligatures; he read over until he came to the right side, where he found that the ligature upon the ovarian artery had slipped entirely off, and the blood was spurting out. The woman at that time had become almost completely exsanguinated, she was pulseless, and the injection of normal salt solution was immediately practiced. The ligature was reapplied, the patient rallied somewhat, and the abdomen was rapidly closed. I never heard the ultimate result.

Slipping of the ligature is, I take it, one of the possibilities, and should always be considered by those who practice gynecic surgery; it is an accident which may happen to anybody. In many of the cases where the abdomen has become enormously distended after the operation, the patient ultimately perishing, death may have been the result of hemorrhage.

Dr. Louis Frank: Bearing upon what Dr. Cartledge has said, upon one side of this tumor the broad ligament was very tense, and as we all know this is the condition where the pedicle is apt to slip from the ligature, and on that account a double ligature was applied after removal of the tumor. The ligatures were all read when the operation was completed, the uterine and ovarian arteries were most carefully ligated, yet it was from one of these arteries that the hemorrhage occurred. It was found that in the ligature which had slipped I had also included the round ligament. The round ligament had been ligated separately, and then a second ligature was put upon that side. After the tumor was removed these two pedicles were brought up and again ligated with one ligature. I am inclined to think that slipping of the ligature was probably induced by vomiting which took place just shortly before the pulse began to go up. I have no doubt that this was probably the cause of the accident. The ligature was firmly fixed, and there was no more tissue in the pedicle than there should have been, but it is probable the intra-abdominal pressure from vomiting without any thing below to form the floor of the pelvis had the tendency to force the broad ligament gradually out from the ligature, and allowed hemorrhage to take place from the pedicle. Had I seen this patient earlier

after the accident I might have controlled the bleeding and perhaps saved her life.

The essay of the evening, *Indications for Enucleation*, was read by Thomas C. Evans, M. D. [See page 418.]

Discussion. Dr. J. M. Ray: I have listened to the paper with a great deal of interest. It deals with a subject that is often brought home to us, how to manage an eye, especially after it has sustained an injury. I remember in my earlier ophthalmological days to have heard one of the most distinguished English ophthalmologists say that there was no question but a good many eyes were removed that ought not to be removed, and he believed the time was coming when a reaction would take place and we would pass to the other extreme. A year or two ago the British Ophthalmological Society appointed a committee to investigate the subject of enucleation, the best operation to perform, the dangers therefrom, and the conditions in which the operation of enucleation was indicated. This committee spent two years or more getting together evidence on the different procedures that have been advised as a substitute for enucleation as well as enucleation itself. The committee recently made a report, which is quite an exhaustive one. They took up the question of enucleation or excision of the eye, as the English call it, Mules' operation; the operation of optico-ciliary neurectomy, in which the optic and ciliary nerves are divided and the eyeball left in position, also the operation of Adams-Frost, which consists in the insertion of a glass ball under the conjunctiva after the eye has been enucleated. This committee gave the conditions demanding enucleation about as follows:

The greatest indication for enucleation was intra-ocular growths, malignant disease, then panophthalmitis and injuries, phthisis bulbi, staphylomatous conditions, and the conditions occurring in late stages of glaucoma with recurring pain. The Mules operation they claimed was indicated in young people in which the injury had been recent, in the staphylomatous eyes, and in absolute glaucomatous eyes. They collected quite a quantity of material, and I was surprised at the favor with which they looked upon the Mules operation. They claimed that there had been more cases reported in which sympathetic inflammation had occurred after ordinary enucleation than after the Mules operation. They claimed that if the Mules operation was performed early pri-

marily after an injury, that the dangers from sympathetic ophthalmia were very slight indeed; that the cases reported were cases in which the operation had not been performed until from two to four weeks after the primary injury, thus allowing the cause, so to speak, of the sympathetic inflammation to have passed from the ciliary nerves back behind the eyeball before the Mules operation was done. That is, if we look upon sympathetic ophthalmia as a result of disease transmitted through the ciliary nerves, the trouble had passed beyond the orbit before the time of operation. The same explanation is made for those cases in which sympathetic trouble follows after the eyeball itself has been removed.

As far as my personal experience is concerned, I have become more and more conservative with reference to enucleation, especially in children, because of the fact that as the child develops there is a certain want of symmetry in the two sides of the face after enucleation. I notice recently that some measurements have been made in these cases with the idea of proving that there is no lack of symmetry. My observation has been that the muscles atrophy, and there is a blank expression to the side of the face from which the eye has been removed. In injuries of the eye in childhood, as long as there is any possibility of sight I am inclined to leave the eye. As Dr. Evans stated, sympathetic ophthalmia has never been found earlier than two weeks after injury to the eye, certainly not earlier than this. The books I think put it three weeks as the earliest, but two or three cases have been reported earlier. I certainly would wait two or three weeks and convince myself that the eye was useless as far as sight is concerned before I would advise enucleation in a child, unless the eye was extensively injured and sight was absolutely beyond any hope of repair.

I believe there is something in the Mules operation, and also in the Adams-Frost operation, and I also believe we are going to do more of these in the future than we have in the past, especially in children, because the cosmetic effect is something to be desired, and these operations certainly offer us something in this line. I would not hesitate to enucleate an eye if painful in a state of panophthalmitis. Very few cases of meningitis have been reported, especially in this country.

Dr. Wm. Bailey: There is one question that I would like to have submitted a little more fully, although not directly embraced in the title of the paper, but it is so germane to it that as a general practitioner I would like some information upon it. While the paper deals only

with the Indications for Enucleation, one of the chief ones is to prevent the so-called sympathetic ophthalmia, and I would like some expression as to how the inflammation in the other eye is induced. I take it that sympathetic in this connection is possibly a misnomer. I would like to know how it is possible that inflammation in one eye can be instituted by disease in the other one. It is claimed to be through the nerve, but how does the organism which is responsible for the inflammatory process travel from one side to the other? What is the process by which the inflammation in the other eye is induced?

Dr. Wm. Cheatham: The question Dr. Bailey asks is a hard one to answer. I believe it is by direct extension along the ciliary nerve. Although it is claimed by some authorities that the infection travels along both the optic and ciliary nerves, I believe it is principally along the ciliary nerve, as stated. For instance, if you have a tender spot in one eye, a sympathetic trouble will start up in the other eye, and you will have a tender spot in a corresponding place.

Drs. Evans and Ray have left us but little to say. One reason, I take it, for advising enucleation has not been mentioned. We must be controlled somewhat by the social condition and occupation of the patient. I have had three or four cases that illustrated this. One was a man with a very large staphyloma of the eye which was continually inflamed and rendered him incapable of work. If that man was in better condition and his occupation different, if he could afford to take a long rest from work, the inflammatory symptoms of the eye might be quieted, and by an adequate operation the staphyloma might be removed, or the Mules operation might be indicated; but as he is a poor man and dependent upon his daily toil, it seems to me the indication is for early enucleation. His social standing and occupation should be considered, and enucleation offers him the best chance of speedy relief. He has already been thrown out of work many times by recurring attacks of inflammation in his eye. I have a case in a young man who had some years ago a gonorrheal ophthalmia which resulted in complete loss of vision in one eye. The cornea is cicatrized, but the eyeball is normal in size; the old cicatrix has opened, and as a result he has panophthalmitis. Although his sight in the eye is lost, and he has panophthalmitis, I would advise enucleation as soon as he is able to have the operation done. I am a little afraid to do it in the active inflammation, as a few cases of meningitis have been known to follow. As soon as the inflammation subsides in this case I would advise enucleation, because

whenever he has an attack of inflammation in this eye he is kept from work for several days or weeks.

Dr. S. G. Dabney: The question Dr. Bailey has asked is one that no one can answer positively. It seems to me a rather significant fact that in the vast majority of cases sympathetic ophthalmia follows after a penetrating wound of the eyeball. It is a somewhat mooted point whether sympathetic ophthalmia does ever occur where the eye has not been opened. I believe there are a few cases on record which go to show it is possible, but it is very uncommon. That would seem to offset the theory that seems otherwise established, that the disease is due to micro-organisms entering the wounded eye and passing along the optic nerve and going down to the other eye. I hardly think that the opinion Dr. Cheatham holds about the ciliary nerves is the one that is now generally believed. I think it is claimed that sympathetic irritation is transmitted from the ciliary nerves, and genuine sympathetic ophthalmia passes along the sheath of the optic nerve.

Dr. Evans' paper was not intended to differentiate especially between Mules' operation and enucleation, but was rather simply to determine whether or not we must remove the eye as a whole or eviscerate its contents, or whether it should be left alone.

In the report of the committee which has been referred to by Dr. Ray, the third indication they give is one of the most difficult ones to make. First, intra-ocular growths, that is plain enough; second, panophthalmitis, that Dr. Cheatham has referred to; it would have been interesting had Dr. Evans said something more about this feature. We are called to see a man, for instance, who has injured his eye two or three days previously, and when seen he has an acute panophthalmitis; if we operate upon him at once we will save him a good many weeks' illness and probably much pain. Noyes in his recent work goes into this subject carefully and gives the dangers as one in four thousand, as far as meningeal complications are concerned, in operating upon an eye in an acute panophthalmitis. The third indication is injury, and that is the one in which we will have the most difficulty to decide whether the eye should be removed at once or whether we can safely wait. I do not remember whether Dr. Evans spoke of the dangerous zone or not. It makes a great deal of difference what part of the eye is injured. If the wound has been through the ciliary region it is far more likely to excite sympathetic ophthalmia than if further back or through the cornea. Another point is that it makes a great

deal of difference how the wound has been made. Wounds made with pieces of glass or a clean instrument can more safely be treated expectantly and operation delayed than where the wound is made with a septic instrument.

In this connection I would ask permission to refer to a case I reported to this Society eighteen months ago, of a young girl who was going home from school; she was wearing her glasses at the time; she was hit on the glasses with a rock, and a piece of the glass was driven into the eye just in the dangerous zone. The piece of glass penetrated just in the ciliary region, and yet because it was a clean piece of glass which was removed directly after the accident, because the girl's sight was not greatly injured, and because I felt confident there was no foreign body in the eye, I delayed the operation, preserved the eye, and she still has useful sight in it. If the same wound had been made with a dirty stick, as in another case also recently seen (about the same time, when an arrow penetrated the ball), the eye would have been promptly enucleated. In the other case mentioned the sight was also more markedly affected. So that something depends upon the location in the eye in which the wound occurs, and something upon the instrument with which the wound is made.

As to foreign bodies in the eye, if an eye is blind and contains a foreign body whose location we do not exactly know, I believe we are safest in removing the eye. The majority of authorities recommend that procedure.

Dr. A. M. Cartledge: I would like to ask a few questions. I am like Doctor Bailey, the question of sympathetic ophthalmia has interested me in a certain way, and these questions are asked merely for information: In what part of the eye do you find the lymphatic distribution most abundant? Are there any lymphatic glands about the eye? Do the lymphatic channels exist, if any, in the ciliary region with the blood-vessels? It seems to me that if sympathetic ophthalmia is dependent upon microbic infection, this infection is probably carried through the lymphatics from one eye to the other.

Dr. T. C. Evans: In regard to the question of sympathetic ophthalmia mentioned by Dr. Bailey, which has been so fully answered: A few years ago a man by the name of Deutschmann made the statement that sympathetic ophthalmia was produced by a pus-forming organism, and that it was by direct extension up to the optic nerve to the fellow-eye. His experiments were made upon rabbits. He went further and

said that he could produce sympathetic ophthalmia by injecting pus into the vitreous cavity. He wrote very long and learnedly on the subject, and had quite a number of advocates and believers in his theory, but it has since passed away, as it was not susceptible of demonstration. At least it is now conceded that sympathetic ophthalmia is not due to pus-forming organisms.

In more direct reply to Dr. Cartledge's question I would say that sympathetic ophthalmia is much less likely to follow panophthalmitis where you have pus in the eye than where you do not. Where the whole interior of the eye is filled with pus we have very little reason to expect the development of sympathetic ophthalmia in the other eye. It is the plastic form of inflammation which is followed by sympathetic ophthalmia in nearly all cases.

To have sympathetic ophthalmia, it is stated, you must have a penetrating wound of the eye, a wound of the ciliary body or iris, which leads us to believe that it is due to some micro-organism that travels by way of the optic nerve or possibly by way of the ciliary nerves. I believe it goes by the way of the optic nerve route, and gets to the opposite eye in this way. What the special germ or micro-organism is which produces this form of inflammation has not been determined.

There are quite a number of points that I would like to have discussed in the paper. The social condition and occupation of the patient must always be taken into consideration in connection with enucleation. Frequently a patient is seen who can ill afford to lose even a week or at the most one or two weeks' time without suffering from loss of income, and in such cases you have to make the best of it and do whatever would be the most advantageous to the patient.

Another point that I think we should always take into consideration is, that if one eye be removed the patient only has one chance left, and he is just as liable to have the remaining eye injured as if he had two eyes. We must also consider the deformity which is necessarily produced by enucleation.

LOUIS FRANK, M. D., *Secretary.*

HAMM is very enthusiastic over the application of the ether spray in the treatment of neuralgia and localized headaches, claiming to have obtained with it very good results. One application is usually sufficient, and only when a recurrence is apprehended is a repetition of the procedure called for. The ether is atomized and spreads over in a thin layer, without ever causing any deleterious effect on the surrounding skin. It is, however, not necessary to continue the spray long.—*Boston Medical and Surgical Journal.*

foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The Public Health; The Oldest Coroner; The City of London Truss Society; Prevention of Consumption; A Red Cross Society; To Fight Insanity; Vaccination and the Army; Lamp Accidents; The Colonial Nursing Association.

During the last week of April the health of London was exceptionally good, and the death-rate fell to, 16.9, forming for the end of April a record. No serious illness prevailed, and influenza was in a quiescent stage.

Mr. Langham, the city of London's coroner, has completed his fiftieth year of office. He is nearly eighty years of age, but is hardly ever prevented from discharging his duties. Mr. Langham, who is the oldest coroner, both in age and service, is to be presented with a congratulatory address from his brother "coroners."

The city of London Truss Society has completed ninety-two years of usefulness. The first year of its existence 229 patients were treated, while in 1898 the numbers who shared in its benefits reached 9,500, making a grand total of 540,000 people who had been helped by its agency. In 1898 no less than 9,531 appliances were supplied to the patients, whose ages ranged from three weeks to ninety-five years. A subscription of one guinea obtains four tickets, and although a person presenting one of these might require an instrument costing far more than that sum, the other three tickets are still available. During the year 1898, £2,841 was expended in appliances, toward which the patients had not been able to contribute any thing.

The National Association for the Prevention of Consumption and other Forms of Tuberculosis has held its first general meeting. All the work in connection with the association is done gratuitously by its officers and members, and it has now been registered at the Board of Trade, so that it may be in a legal position to receive bequests. Dr. Thompson, in presenting the report of the organizing committee, showed that the movement had its inception at a private meeting of some medical men held on June 22, 1898, when it was unanimously agreed that a public movement should be inaugurated for the purpose of endeavoring to prevent the ravages caused by tuberculosis in the United Kingdom. It was decided to promote the cause by (1) the education of public opinion and the stimulation of individual initiative; (2) the influencing of Parliament and other public bodies on the subject, and (3) the establishment of branches throughout the kingdom. The present enrolled members number 1,252. Thirty prominent

men have been elected as the council, included being Sir William Broadbent, M. D., and Professor McFadyean.

For the purpose of bringing voluntary medical and nursing aid throughout the British Empire into touch with the requirements of the army medical service, a central British Red Cross Committee has been formed under the auspices of the war office. For some time on the continent voluntary aid organization under Central National Committees of the Red Cross has attained a high state of perfection, and is organized so admirably that in the event of war abundance of voluntary help will be forthcoming. It is now intended to bring the British Empire up to the continental standard, and Sir William MacCormac, of St. Thomas' Hospital, has promised to give his aid with this view.

The Technical Education Board of the London County Council is offering a scholarship of £150 a year, tenable for two years, for students of either sex, to enable them to investigate into the preventable causes of insanity. The student obtaining the scholarship is to work in the Pathological Laboratory of the Claybury Asylum. The need for riveting attention on this subject has been shown by recent lunacy reports.

Dr. Doran, the President of the Obstetrical Society of London, in a discussion upon puerperal eclampsia, observed what a disputed point the cause of eclampsia and its treatment was. He pointed out that Winkler insisted that it always arose from renal mischief in the mother; according to Hoffman it was due to toxemia from carbamide of ammonium; Baron alleged that it arose from toxic elements developed in the living fetus, the fits ceasing when it died; whilst Schaller seemed to have slight belief in any active influence of the fetus, alleging that its kidneys did not act before parturition. As to treatment, Dr. Doran said that Lambinon, of Liege, bled in bad cases, but the great success of subcutaneous saline infusions in puerperal septicemia and in sepsis after abdominal section seemed to indicate the correct treatment for eclampsia unrelieved after expulsion of the fetus.

Inquiries having been made respecting the application of the new vaccination act in the army, it has been decided that the unvaccinated wife or family of a soldier must not be allowed to be brought into contact with troops, or with other families of soldiers in such a way as to jeopardize their health. The unvaccinated wife or family, in such a case, would therefore not be allowed to live in barracks, nor would they be conveyed to any foreign station at the public expense.

Miss Chadburn, a student of the London School of Medicine and Royal Free Hospital, has the distinction of being the first lady to receive the M. D. degree in connection with the University of London.

The honorary secretary of the Coroner's Society has called attention to the large number of petroleum and paraffin lamp accidents which are constantly taking place. It is suggested by the Public Control Department of the County Council that the raising the flash point fixed by the Petroleum

Acts would not alone be effective in preventing accidents. The mineral oils in common use can be safely burnt in properly constructed lamps. Cheap and defective lamps are, for the most part, the cause of all the mischief, the penny gum bottle lamp being especially dangerous. Mr. Braxton Hicks, the coroner for London and Surrey, says that in London alone since 1870, 374 deaths from lamp accidents are recorded, and that in very few of these cases has it to be proved that the death was brought about in any other way than from the defective construction of the lamp.

The Colonial Nursing Association has for the past three years been carrying on a work of great importance. The association carefully selects the nurses, pays their passage out, and guarantees their salary for a term of years. The movement has the support of the Colonial office, who have, through its means, provided nurses for Government institutions in Hong Kong, Cypress, Trinidad, Bahamas, Gold Coast, Lagos, and other places. Six colonies have recently applied for aid, and will be supplied with qualified nurses during the coming year. Nurses have been sent to private patients at Mauritius, Perak, Selangoe, Ceylon, and Bangkok.

LONDON, May, 1899.

Abstracts and Selections.

VENEREAL ARTHROPATHIES.—In the December ('98) number of the *Annals of Surgery* an article appears by Stewart LeRoy McCurdy, of Pittsburgh, entitled "Venereal Arthropathies," which it seems to me is likely to give an incorrect idea of the importance of gonorrhea and syphilis as etiological factors in the causation of adult joint diseases. The writer states as his belief that a great majority of the men who went through the Civil War contracted syphilis, and in consequence of that the writer thinks it not improbable that a great many cases of Pott's and hip disease in children, which we have been in the habit of considering tubercular affections, if not wholly due to syphilis, are at least mixed infections of tuberculosis and syphilis. There can be no doubt that both gonorrhea and syphilis are concerned to some extent in the production of certain of the adult arthropathies, but I am sure that many of the statements made in the article referred to can not be proven.

The citation of a few cases of undoubted gonorrheal joint affections is a fallacious way of proving its very great frequency in causing the arthropathies of adults.

Judging from the observation of a considerable number of adult joints coming to the Orthopedic Clinic of the Carney Hospital and the Boston Dispensary, I feel very sure that those in which gonorrhea is a cause would form a small proportion of the whole, whereas those caused by syphilis would be very much less. The great bulk of such cases is produced by tuberculosis, osteo-arthritis or rheumatoid arthritis.

Pathological findings afford the only real ground for diagnosis.

If the author of the article in the *Annals* holds the correct views, it could not be otherwise than that a certain number of these syphilitic joints should come to excision through mistaken diagnoses. If that were the case, it would seem probable that the operator as well as the pathologist would have called attention to the error, for there is no resemblance between the lesions of syphilis, tuberculosis, and gonorrhea, at least not if a fair opportunity of examination is afforded the pathologist.

The evidence brought forward to substantiate the claim that inherited syphilis is concerned in the production of the diseases of children now classed as Pott's and hip is even less convincing. The reports of Cases V, VI, and VII are inadequate for the purpose. No mention is made of previous history, which ought to show a syphilitic taint in the family—it is not even apparent that the father went to the war. There is no symptom mentioned which could not go with a purely tubercular hip or Pott's disease, neither is there any reference to any sign or symptom which would suggest a syphilitic affection. When it comes to treatment, all three of these cases had appliances and were given at the same time antisymphilitic drugs, and it does not appear that they were any better off at the end of the treatment than are many cases that do not get iodide of potassium.

From the point of view of diagnosis, the substitution of a therapeutic test, especially when backed by such inconclusive evidence, for a pathological one seems a very hazardous undertaking, in the light of our present knowledge.

From the point of view of treatment, it is extremely illogical to attribute to a drug an amount of improvement which is to be expected, and does occur, under mechanical treatment alone, when both methods of treatment are applied simultaneously to the same cases. And, finally, from the etiological point of view, some weightier evidence than the assumption that an opportunity was afforded the soldiers in the Civil War to contract syphilis, of which a majority availed themselves, must be brought forward before this disease can take rank with tuberculosis as the etiological factor in the causation of about twenty-five per cent of all surgical affections.—*C. F. Painter, M. D., in Boston Medical and Surgical Journal.*

ADVANCES IN OUR KNOWLEDGE OF TYPHOID FEVER.—Since the sad experience of our troops at home and abroad last year with typhoid fever, medical interest in the disease has been, if possible, even more keen with regard to every thing pertaining to it than before. The springtime nearly always witnesses a recrudescence of the disease in various parts of the country, owing to the fact that the melting snows and the spring freshets carry down with them into the water-supplies of towns a certain amount of infective typhoid material that has been accumulating during the winter months. Typhoid is one of those diseases of which the practitioner is apt to think that "there is nothing new under the sun," at least, nothing new

that has a practical application, or is of value in the prophylaxis or treatment of the disease. A glance, we think, at Dr. Taylor's article on "Typhoid Fever" in *Progressive Medicine*, the new quarterly review of medical progress, edited by Professor Hare, is apt to disabuse one of any such unprogressive notion.

With regard to prophylaxis of others during the treatment of a case of typhoid, these noteworthy recommendations from a French source are given: (1) Isolate patients suffering from typhoid fever, or at least do not permit them to be treated in a room or ward containing young people who have not previously had typhoid. The warning contains some wholesome advice too often neglected, and sometimes with sad results, because we are persuaded that typhoid is not an air-borne disease, and forget that contiguity favors infection, because precautions will inevitably sometimes be neglected. (2) Nurses for typhoid cases should, if possible, be only such as have had typhoid themselves. In a family the young people should be removed. (3) The floor of the sick-room should be oiled, so as to be impermeable. Carpets and rugs should be removed, and the raising of dust should be avoided by frequent use of a cloth dampened with antiseptic solution. (4) The nurses should wear linen clothes, which they should remove when they leave the sick-room, and in general they should be warned to be circumspect in their relations with others, and especially careful of the utmost details of antisepsis in the matter of the preparation of food and drink for themselves and others.

The review of the question of typhoid infection from oysters is full and conclusive. The possibility of typhoid infection through salads is made clearly apparent, manure being used in bleaching the plants, and gardeners being careless in handling it and washing the plants in any sort of water, or sprinkling them with infected cistern water.

The strikingly practical features of this excellent review of the recent literature of typhoid are the discussions of the question of typhoid without intestinal lesions and of its corollary, that intestinal lesions, even when existent, often play a very minor role in the disease. How important these questions are for the matter of treatment is clear at once. All the so-called abortive methods of treatment, all the much-lauded systems for securing intestinal antisepsis, all the many drug formulæ and combinations that have been enthusiastically recommended for the treatment of typhoid assume that the essence of the disease is the intestinal lesions. This is a notion that must disappear before scientific advance of our knowledge of the true nature of the disease.—*Medical Progress.*

THE VITALITY OF EPITHELIAL CELLS AND THE ETIOLOGY OF CANCER.—What the nature of the irritant may be that causes the localized overgrowth of epithelial cells, which we call cancer, we are yet no nearer knowing than we were before the demonstration of its exact pathology, more than half a century ago. Notwithstanding all the claims that have been

made of the causal influence of external biologic factors, parasites from bacteria, and fungi, schizomycetes, and blastomycetes to various forms of animal parasites, gregarines, and protozoa generally, we are no nearer the solution of the problem than we were before.

Of late the subject has been approached from the other side, the essential vitality of epithelial cells and their reaction to various irritants, and some most interesting results have been obtained by various observers. In Dr. Hektoen's review of this subject for the first number of *Progressive Medicine* (the advance sheets of which are in our hands), we find some striking observations on the subject collated. Ljunggren, a Scandinavian physician, for instance, found to his surprise that he could preserve carefully sterilized bits of human skin in sterile human ascitic fluid for months, and that the cells of the tissues retained their vitality. Three months after their removal from the body the cells of the deeper layers showed well-stained nuclei and good protoplasmic structure. Successful transplantation was made with pieces kept in such sterile fluid for a month. Small pieces of the transplanted skin were removed at varying intervals, and it was found that a marked proliferation of epithelial cells showing many nuclear figures had occurred. Special precautions were taken, which absolutely assured the absence of cells that might have grown in from the surrounding cutaneous margin and so vitiated the conclusions. The transplanted cells not only grew over the raw surface, but penetrated also into the granulation tissue beneath after the manner of a beginning carcinomatous growth.

Almost more interesting and suggestive than this are the observations made by Loeb here in America on epithelial regeneration. The abstract of them by Dr. Hektoen in *Progressive Medicine* is so clear and succinct that we copy part of it verbatim: "From the margin of a tissue-defect huge epithelial protoplasmic or plasmodial masses move in a sliding manner over the naked surface, inclosing and dissolving the crust and other obstacles. Regenerating epithelium readily removes such substances as cartilage when placed in its way. Below the protoplasmic layer epithelial cells wander in from the margins of the defect, and often grow down into the connective tissue, apparently checking the growth of the latter. The process is closely allied to changes in carcinoma. At the same time active changes, such as mitosis, occur in the epithelial cells removed some distance from the margins of the wound. . . . Loeb believes that the wandering of the cells, as outlined, is in response to stereotropism, and forms a determining factor in inducing mitosis in the remaining cells." The pregnant significance of these observations, especially the apparent action at a distance of epithelial elements in arousing epithelial cells into reproductive and germinal activity, can scarcely be overestimated. This is the essence of carcinoma, though in healthy subjects the vital resistance may be sufficient to restrain the morbid overgrowth that would otherwise result.

According to Loeb, "If a small bit of epithelium is placed in the center

of the crust covering a defect in the skin, it begins to send out processes in all directions into the crust, the cells acting as separate organisms, independent of blood-supply or nervous influence." We are evidently closely in touch in these manifestations with the as yet inexplicable vital forces that we see at work in all their untrammelled energy and power in cancer. Further observations are needed to give the deductions from these observations practical application. They constitute, however, the most hopeful aspect of the present pathological work on cancer as far as regards the near prospect of discovering its etiology. Their value as additions to biological science, especially to that mysterious problem, the struggle for life among the various cells of the body tissues, can scarcely be overestimated.—*Ibid.*

"INFILTRATION ANESTHESIA" FOR SURGICAL PURPOSES.—In a recent number of the *Archiv für Klinische Chirurgie* (September, 1898) Dr. H. Braun records the result of a careful investigation upon various local anesthetics, part of which was pursued in conjunction with Dr. Heinze. Of local anesthesia, three kinds are distinguished. Thus the anesthesia may be purely mechanical, or it may be partly mechanical and partly due to the paralyzing influence of the material injected on the sensory nerves, or, finally, it may be a true regional anesthesia due to the specific local action of the drug used upon the terminal nerve fibers. During the investigation Dr. Braun and Dr. Heinze experimented with a number of the more recently proposed anesthetics, including guaiacol, aneson, orthoform, eucaine "A," as well as cocaine. Of these the majority were found to be more or less irritating, and therefore unsuitable for "infiltration anesthesia." Guaiacol in particular was very objectionable in this respect, as well as in its being insoluble in water. Eucaine "A" was the only one which effected a practically useful local anesthesia, though it seemed not quite equal to cocaine in its local anesthetic effect, or in the absence of irritation. Cocaine was next investigated, and the strength of the weakest solution giving anesthesia was ascertained. This was found to be 0.005 per cent, *i. e.*, 1 in 20,000, or approximately one grain of the hydrochlorate to two pints of distilled water in English measure. Eucaine "B," a substance closely related to cocaine, was also found to have the same lower limit of effective action. The actual pain of the injection was masked by using a less weak solution, *e. g.*, 0.04 per cent solution of either of these drugs, *i. e.*, one grain to five ounces of water. It was also found that stronger solutions of either of these drugs caused no local pain on injection. The intensity and duration of the local anesthesia were the same for solutions of either drug of equal percentages; but the spread of the anesthesia beyond the limits of the directly infiltrated area was somewhat slower with a one-per-cent eucaine "B" solution than with one of cocaine. The order of efficiency was found to be as follows: first, cocaine; second, eucaine "B;" third, eucaine "A." The general conclusions are that cocaine and eucaine "B" are the only two substances to be considered in the selection of a drug for infiltration anes-

thesia; that they alone cause local sensory paralysis without irritation and without injury to the tissues, and that they alone effect anesthesia lasting enough for practical purposes, even when injected in extremely dilute solution. — *Lancet*.

CHANGES IN THE SPINAL CORD IN PERNICIOUS ANEMIA.—In a recent number of the *Neurologisches Centralblatt* appears an abstract of an important paper published by Dr. Wilhelm Gobel in the *Mittheilungen aus den Hamburgischen Staatskrankenanstalten*. The writer had subjected to close examination the cords from six cases of pernicious anemia, especially by means of Marchi's method. The first case was that of a woman, aged sixty-three years, who had had no spinal symptoms, and in her case the cord showed only very slight alteration in the anterior columns, with no changes in the vessels. In the second case, that of a man, aged fifty-one years, in whom during life the knee-jerks were absent, there was visible partial degeneration of the extra-medullary posterior roots of the lumbar and lower dorsal cord. Examination by Nissl's method also showed cell changes in the cervical cord. The third case, that of a child, aged five years, showed no changes in the spinal cord. The fourth case, that of a man, aged sixty-three years, with loss of knee-jerks, showed microscopic changes in widespread asymmetrical alterations of the posterior columns, especially in the cervical region. There were also slight changes in the pyramidal tracts visible with the microscope, and also alteration in the cells of the gray matter. The fifth case was that of a woman, aged fifty years, who had weakness of the legs, loss of knee-jerk, and weakness of the bladder. There were only slight alterations in the lumbar cord. In the cervical region there was symmetrical affection of the posterior columns, the gray matter here and in the lumbar region being only slightly affected. The last case, that of a man, aged twenty-seven years, showed a few scattered patches of change in the white substance unconnected with vascular changes. The ganglion cells in the cervical region were atrophic and deeply pigmented. Dr. Gobel thinks it unlikely that the alterations in the gray matter originate the changes in the white, because when the affection is slight the former are often absent, and they never seem to bear any true proportion to the latter. Nor does he think with Minnich and Nonne that the vascular affection determines the changes, because when the changes in the spinal cord are greatest the changes in the vessels are frequently absent, and when the changes in the vessels are present there may be no degeneration. And it is not yet clear how great a role in spinal cord degenerations toxic substances play, these being carried presumably in the blood. *Ibid*.

A MOUTH WASH FOR APHTHÆ IN CHILDREN.—The ulcerations are to be touched four or five times per day with a brush rubbed in the following:

- | | | | |
|---|--------------------|-------|------|
| R | Sodium bichlorate, | | 3i; |
| | Tinct. myrrhæ, | | 3ii; |
| | Blackberry syrup, | | 3x. |

THE AMERICAN PRACTITIONER AND NEWS.

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THE STATE SOCIETY.

The May meeting of the Kentucky State Medical Society at Louisville was notable in every particular. The weather was favorable, the attendance large, the programme rich, and the social features all that heart could desire.

It does indeed look as if the old Society has taken on new life, and that it will rival, if not eclipse, the record of its palmy post-bellum days.

The selection of Prof. William Bailey for the presidency does justice to a faithful Fellow, a learned, eminent, and worthy man.

We are happy to inform our readers that we are prepared to print in full text or in abstract all the papers presented at the meeting, with a complete stenographic report of the transactions. And we here tender our best thanks to the authors, who with almost unanimity have placed their manuscripts in our hands.

The address of the retiring president, Dr. David Barrow, of Lexington, will be found in full elsewhere in this issue. It is an able and timely discussion of rest as a hygienic, prophylactic, and therapeutic measure. The gifted author discusses the question in a popular manner; but with a depth of thought and richness of erudition that gives it permanent value in medical literature.

We trust that the spirit of brotherly love and zeal for science so richly shed abroad in the hearts of the many delegates who honored the

May meeting with their attendance will result in such a revival of true medical religion in the State as shall bring the old Society up to imposing numbers, and make it equal, if not superior, to similar organizations in other States.

Let every member resolve to push the prophecy to a brilliant fulfillment.

Notes and Queries.

CHRISTIAN SCIENCE AND THE LAW IN AMERICA.—Not long ago we referred to a case in which an adept of the Christian Science school who had ministered, after the manner of the sect, to a patient suffering from typhoid fever which proved fatal, was convicted of practicing medicine without a license, and to another in which a similar decision by a judge had been appealed against, the Supreme Court of the State (Rhode Island) having the knotty problem propounded to it whether Christian Science is a method of medical practice or a system of religion. The Court has not yet, as far as we are aware, delivered judgment. In the mean time the Court of Common Pleas in Ohio has decided in another case that the rites which the Christian Science healer performed "were religious and not medical, and therefore not within the State medical law, under which she was prosecuted." As an illustration of the "religious" rites practiced by these deluded people and their results, the following story told by Dr. Frank S. Billings in a recent issue of the New York Times may be cited. We give it in his own words:

"Mrs. — was the pretty young wife of a clerk. Her mother was a maniacal Christian Scientist. When it came time for Mrs. — to be confined, the husband was told he might go to business, and the mother (mother-in-law) took the case in hand, aided by a Christian Scientist healer. The poor girl began to suffer, and the fool women put a Bible on her abdomen and told her that her pains were all imagination, that the Lord never gave people pain, and so on, *ad nauseam*. The agonies of that poor child must have been terrific, for neighbors heard her screaming and begging for a physician, but these Christian fiends never let up. Finally the pain stopped; no further screaming was heard. The reason was that the child had ruptured the womb, and was in the abdominal cavity of the mother. Then there was rushing in mad haste. The husband was sent for, the physician was sent for, but too late; the woman died of hemorrhage, and the child choked to death. Two murders! But were these women prosecuted? Not a bit of it. Public sentiment was entirely on their side, and no official dared to issue a warrant. 'It was God's will to take his dear ones that way,' said the minister (not a Christian Scientist) at the funeral."

We need not comment on the tragedy here narrated. We may, however, call attention to the fact that the patient begged for a physician. As one

was not immediately sent for, this might have been thought sufficient to bring the foolish matrons in attendance within the grasp of the law, on the ground of willful neglect. Tender as the law is in this country in its treatment of quacks, it appears to be still more tender in America. In view of the case which has been referred to, it may be interesting to quote the method of conducting childbirth according to the principles of Christian Science as laid down by Mrs. Eddy in *Science and Health* (page 459): "Teacher and student should also be familiar with the obstetrics taught by this Science. To attend properly the birth of the new child, or the divine idea, you should so detach mortal thought from its material conceptions that the birth will be natural and safe. Though gathering new energies, an idea should injure none of its useful surroundings in the travail of spiritual birth. It should not have within it a single element of error, and should remove properly whatever is offensive. Then would the new idea, conceived and born of Truth and Love, be clad in white garments. Its beginning will be meek, its growth sturdy, and its maturity undecaying. When this new birth takes place, the Christian Science infant is born of the Spirit, and can cause the mother no more suffering. Thus it will always be when truth is allowed to fulfill her perfect work." If detaching mortal thought from material conceptions be the secret of safe and natural midwifery, the poor girl to whom allusion has been made should not have died, for the women about her had evidently detached their thoughts from any thing so material as a suffering sister and her child. Perhaps, however, Mrs. Eddy would say their treatment was meddling, as no mention is made by her of the application of a Bible to the abdomen.—*British Medical Journal*.

SOLOMON RIGHT AGAIN.—The *Indian Lancet* for November 16th quotes the following:

"In Notes and Queries," says the *New York Times*, "there is a story quoted written by Mir Muhammad M'asum in 1660. An exiled prince meets a man who is carrying what are designated as 'hakku tubes.' Looking at the man the prince discovers that just as long as the man holds the hakku tubes his entire interior economy is visible. The prince at once purchases the tubes. Coming to Ghuzni, he finds a patient. The king of Ghuzni is suffering from dyspepsia. There is good reason for the king feeling so uncomfortable, for when the hakku tubing is applied, it is discovered that the patient had swallowed not less than two water snakes. Readers will then please observe that the X-rays have been anticipated. The original of the story is found in Elliott's History of India by its own historians. After a while we may discover that Noah's ark had water-tight bulkheads and twin screws."—*New York Medical Journal*.

THE MEDICAL IDEAL.—"The physician, then, is more than a naturalist; he is the minister not only of humanity at large, but of man himself. Thus it is that the humblest of us, and he who labors in the darkest and

most thankless parts of our cities, is never a drudge; in the sight of the angels he is illustrious by the light of his service to men and women. The man of science can tell us delightful things about birds, flowers, and wild life, for all life is various and touching; he can tell us queer and uncomfortable things about our insides, amazingly useful things about steam and electricity, but at bottom, when the marvel is over, or the material gain is won, all this grows stale. Ideas concerning the harmony of the spheres, concerning cosmic evolution, concerning the inhabitants of Mars, are prodigious; they may uplift us sometimes with a sense of the greatness of man's inheritance, but alone they are cold and unsatisfying. The child of his age feels that a sonnet of Wordsworth, a flash of Browning's lamp into a man's heart, an idyll of Tennyson give us thoughts worth more than all the billions of whirling stones in the universe. In strengthening and cherishing this inner life of his brother and sister, happily, the physician has many fellows, but the physician alone among them all holds sacred the lamp of the personal life for its own individual sake; he alone forgets Church, State, nay, even the human race itself, in his tender care for the suffering man and for the suffering woman who come to him for help."—*Dr. T. Clifford Allbutt.*

THE RELATIONS EXISTING BETWEEN DRUGS AND THE STOMACH.—

It is seldom that a drug becomes inactive in the stomach, though this is the case with pancreatic preparations and those alkaline substances which as such are expected to work upon the intestine. The action of the stomach toward the absorption of drugs is much more important. The experiments of the last few years show that this is almost *nil*, the stomach's task being confined to a greater or less digestion of its contents and the expulsion of the same into the intestine. Sugar and peptones in five-per-cent solution, sodium iodide in one-per-cent solution, and even water, pass unchanged through the pylorus. Therefore, we must remember that medicines, likewise, are not taken up by the system till they leave the stomach. The question of the absorption of a drug is thus simplified and depends upon the celerity with which it reaches the intestine. Here we know that absorption goes on rapidly.

Can we now hasten the passage of a drug through the stomach, or, in other words, hasten absorption? Water and neutral solutions leave the stomach most quickly. Half a litre of water leaves the stomach in one half or three quarters of an hour, and a glass of water in about half that time. Acid solutions, soups, milk, beer, and, notably, oil, pass onward much more slowly, and perhaps for the reason that they stimulate the gastric secretion. Where this is done, digestion is prolonged. In quite the same way water taken with food requires more time to reach the pylorus than it would when taken by itself; therefore drugs leave the stomach and consequently are most quickly absorbed when given with plain water, less rapidly in soups or milk, more slowly when after a meal, and most slowly when given

without fluid after a meal. These conclusions Moritz proved by experiments with sodium salicylate, potassium iodide, and charcoal. In this way we can explain the quicker action of alcohol on an empty stomach than when taken with a meal. It is not from the rapidity of absorption of the alcohol in the stomach, but on account of the rapidity with which it reaches the duodenum, and from there the circulation.

We can avoid irritation of the stomach by drugs by means of subcutaneous and rectal injections. This is not wholly satisfactory, as in the case of morphine, which, though injected under the skin, is excreted through the stomach, and can then work harmfully on the digestion. Another means is by the administration of substances insoluble in the stomach, but decomposed by the pancreatic juice into soluble products. Such, for instance, are the salol bodies and the combinations of tannin with albumin. Still another means is to enclose our medicants in pills or capsules capable of passing unharmed through the stomach, as the glutoid capsules recommended by Sahli. But these methods will not wholly suffice, and we must come back to the facts stated at the outset. A drug will irritate the stomach less the more quickly it leaves it and the more it is diluted. This is attained by giving the drug with water on an empty stomach.

Mucilaginous vehicles for drugs are good, because the HCl secretion is less when they are so given. Naturally they do not leave the stomach so quickly, but this is more than made up by the protective working of the mixture.

If the motility of the stomach is at fault, then all our conclusions must be changed. Tappeiner has shown this in a pretty experiment. Watery solutions of chloral will narcotize a dog when given by the mouth, but are inactive if the pylorus is shut off from the remainder of the organ. It is interesting that the chloral becomes active again if later alcohol is introduced into the stomach. Alcohol therefore favors absorption. V. Mering and Brandl have confirmed this work of Tappeiner, and the latter has shown that salt, peppermint, pepper, and orexine have a similar power.—*Boston Medical and Surgical Journal*.

NUCLEUS FOR THE DIAPHRAGM. — In a recent number of the *Journal Medical de Bruxelles*, Fritz Sano gives first of all a short *resume* of the literature dealing with this subject, and especially of the work of Otto Kaiser, who, as a result of researches in comparative anatomy, concluded that the nucleus for the diaphragm extends from the third to the fifth or sixth cervical segment, between the nuclei on the one hand of the muscles of the back and the nucleus accessorius on the other, and that the posterior median group of cells furnishes fibers to the phrenic nerve. Further, a case related by Collins seems to indicate that the nucleus of the phrenic in man lies in the lower part of the third cervical segment. The writer of this paper cut the phrenic nerve in a cat aged three months, and examined the

cord by Nissl's method. The result of the examination indicated that the phrenic nucleus occupies the central part of the anterior horn and reaches from the third to the middle of the sixth cervical segment. The cells of the sensory neurons, which are in relation to the diaphragm, lie in the spinal ganglia of the third to the sixth cervical nerves, and the sympathetic fibers come from the middle and inferior cervical ganglia, and in part also from the first thoracic ganglion.— *Lancet*.

ACCORDING to Radestock, the generally accepted dosage of potassium iodide in syphilis is rather too small. In one case he administered as much as 375 grains in one day, and has frequently given daily doses ranging from 150 to 225 grains. When well dissolved the salt becomes perfectly harmless for the stomach. In view of the high price of the salt, he thinks that iodide could be administered diluted in a syrup or wine. He recommends for this purpose Brown-Sequard's solution :

R Iodini, ... gr. vi;
Potass. iodidi, ... ℥ss;
Aq. destil, ... ℥iiss.

M. Sig: A teaspoonful three times a day in a glass of wine before meals.

REMOVAL OF WARTS.—Widal recommends in the *Journal de Medecine de Paris* a very simple method for the removal of warts, namely, a flannel over which is spread some *sapo viridis*, placed over the wart for a period of fourteen days, by the end of which time the wart will become so soft as to be easily shelled out.—*Boston Medical and Surgical Journal*.

TREATMENT OF FAVUS OF THE HAIRY SCALP.—As far as prophylaxis is concerned, general cleanliness, and especially as regards the head, is of very great importance. As treatment O. v. Petersen considers it necessary first to soften the scabs with a one-per-cent carbolated vaseline ointment, which renders their removal very easy. This repeated several times makes the head clean, after which the diseased area is painted over with iodine tincture. In view of a possible strong reaction after the application of the iodine, the intervals between the applications are lengthened. Epilation is not necessary.—*Boston Medical and Surgical Journal*.

FOR COCAINE POISONING.—

R Amyl nitrite, }
Spir. vin., } āā ℥i.

M. Et sig: Inhale the vapors thus produced.

Special Notices.

I HAVE been a practicing physician for twenty-five years and have never used a better remedy than Seng. There is nothing better in dyspepsia and cholera infantum. I have no use for codliver oil, as Seng is pleasant to take and gives much more gratifying results in all cases where a rebuildier is needed.

McKey, I. T.

SAMUEL F. MOORE, M. D.

THE MODIFICATION OF COW'S MILK FOR ARTIFICIALLY FED INFANTS.—In order to prevent the firm clotting to which cow's milk is prone, some alkaline solution may be added, or some prefer to use a small quantity of a mucilaginous or other thickening substance, such as barley-water, a solution of gelatine, or one of the prepared foods, which act mechanically in obviating the formation of firm clots. Mellin's Food may be used; in this the starch has been converted into dextrine and maltose.—From "Food in Health and Disease," by I. Burney Yeo, M. D., F. R. C. P.

FOR the past ten years I have constantly prescribed Peacock's Bromides, and find it the sedative and anodyne par excellence in all convulsive and neurotic lesions, and I prescribe no other. I find it superior to the commercial bromides in simple combinations. It will give me much pleasure to further utilize it as occasions demand.

Huntington, W. Va.

CHAS. KELLY GARDNER, M. D.

Notwithstanding the large number of Hypophosphites on the market, it is quite difficult to obtain a uniform and reliable Syrup. "Robinson's" is a highly elegant preparation, and possesses an advantage over some others, in that it holds the various salts, including Iron, Quinine, and Strychnine, etc., in perfect solution, and is not liable to the formation of fungous growths.

SANMETTO AND SUBSTITUTES WITH THE "SAME FORMULÆ."—I have used Sanmetto in cases of catarrh of the bladder and enlargement of the prostate gland with great success. In fact, I never saw any thing so near a specific. Henceforth I will not be without Sanmetto. Saw-palmetto and Sanmetto substitutes with the "same formulæ" do not act nearly so well. I therefore, with pleasure, recommend Sanmetto to the medical profession.

Calis, W. Va.

J. L. SAMMONS, M. D.

SOLAR HEAT.—Direct exposure to the sun's rays; employment in or living in hot and poorly ventilated offices, workshops, or rooms, are among the most prolific causes of headache in summer time, as well as of heat exhaustion and sunstroke. For these headaches and for the nausea which often accompanies them, antikamnia will be found to afford prompt relief and can be safely given. Insomnia from solar heat is readily overcome by one or two five-grain antikamnia tablets at supper time, and again before retiring. If these conditions are partly dependent upon a disordered stomach, two five-grain antikamnia tablets with fifteen or twenty drops of aromatic spirits of ammonia, well diluted, are advisable. For the pain following sun or heat-stroke, antikamnia in doses of one or two tablets every two or three hours will produce the ease and rest necessary to complete recovery. As a preventive of and cure for nausea while traveling by railroad or steamboat, and for genuine *mal de mer* or seasickness, antikamnia is unsurpassed, and is recommended by the Surgeons of the White Star, Cunard, and American Steamship Lines.

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

PECULIARITIES IN HEART AFFECTIONS IN CHILDREN.*

BY PHILIP F. BARBOUR, M. D.

Professor of Chemistry and Diseases of Children in the Hospital College of Medicine, Louisville, Ky.

Heart affections in children exhibit so many variations from the accepted types of such diseases in adults that their mere recital would occupy your valuable time and be as uninteresting as such catalogues usually are. I will not, therefore, weary you by discussing congenital anomalies and other well-known peculiarities, but, selecting some of the more important differences, will direct your attention thereto, hoping to provoke further interest in these more or less obscure diseased conditions.

The liability to organic diseases of the heart and the infrequency of functional troubles may be mentioned as a peculiarity in childhood. The day has long since passed when rheumatism was classed as a disease affecting only adults. Now we know that it is very often observed in children, and I would have you note just here that rheumatism is much more apt to attack the heart of the child than that of the adult. This should be kept especially in mind, for after symptoms the most vague and unsatisfactory, from the standpoint of diagnosis, we may observe the development of an endo- or peri-carditis, which may seriously affect the chances of the patient for long life.

"Growing pains," which are so unworthy of notice by the laity, are sure harbingers of rheumatism, and oftentimes precede only shortly acute endocarditis. A wryneck or a tonsillitis may be the only mau-

* Read before the Kentucky State Medical Society at Louisville, May 18, 1899.

ifestation of a rheumatic diathesis, but woe to the child whose physician is not thereby put on the alert. Chorea and erythema marginatum are equally significant, and all such cases should be watched closely by the physician, who may be able to prevent endocarditis, though his therapeutic skill would be taxed to cure it.

Endocarditis is not always easily diagnosed in children. Heart sounds have not that definiteness that is acquired in later life. They are heard all over the chest, and in many cases may be auscultated best at the back. The second sound on the pulmonic side is louder than on the aortic. The extreme rapidity of the heart's action, coupled with the fact that the first sound is shorter and sharper than obtains later, makes the differentiation between the two sounds sometimes difficult. In addition to these, functional, anemic, and other murmurs conspire to perplex and baffle the diagnostician.

Endocarditis involving a valve puts increased work on the heart and produces an hypertrophy which varies with the part of the heart affected. But the outlines of heart dulness and the position of the apex beat vary with the age of the child. The heart seems to occupy a more horizontal position in the child's thorax than in the adult's, for the apex beat is normally outside the mammillary line and in the fourth interspace. Toward the fourth year the apex reaches the nipple line and the fifth interspace, and thereafter approximates more and more closely the position it is to occupy in after years. So hypertrophy of the left ventricle in the child produces very great deviation of the apex beat to the left and a bulging of an enlarged precordial area. Mitral insufficiency is the most frequent lesion resulting from endocarditis, though the prenatal attacks are more apt to produce lesions of the right side of the heart. The fact that endocarditis may occur in childhood without those disagreeable sensations, pains, palpitation, etc., that are noticed in some adults should make us very careful in our treatment of infantile rheumatism to watch for and guard against the development of endocardial inflammation. It must not be forgotten that rheumatism is not the only disease that will produce endocarditis. Scarlet fever, diphtheria, and even measles have their quota of cases, and demand just as intelligent forethought on this point.

The course of endocarditis in children is very annoying and trying to the physician. It is absolutely necessary to keep the child in bed, to give the proper quantity and quality of food, and to maintain, through weeks of time, absolute rest, even though the child feels all right and

is anxious to get up. Yet after the long and intelligent conduct of such a case, the departure of a loved nurse, the giving up of some pleasure, may produce an exacerbation of the trouble, and the whole battle must be fought over again. The tremendous influence of the nervous system must be kept in mind always. Then such agents as the iodids, which do such yeoman service in our adult cases, are not well borne by children when given for great length of time, not even the iodide of iron.

The disappearance of endocardial murmurs is sometimes noticed about puberty. Aortic stenosis seems to have the best prognosis in this respect of any of the valvular lesions. The natural growth of the heart must produce also an increase in the size of its openings, which may be sufficient to remove most of the obstruction at either the aortic or mitral orifice.

The complication of a pericarditis with an endocarditis and the development of a pericarditis solus must be noticed, for they occur too often in childhood. Pneumonia, empyema, rheumatism, scarlet fever, or Bright's disease may initiate an inflammation of the pericardium with its serious results. That many children die from an unnoticed and undiagnosed pericarditis has been demonstrated many times in the deadroom, yet with thorough examination of the child, and with the possibility of such lesions kept constantly in mind, such mistakes ought to be made but rarely. The consequences of fibrous adhesions between the surfaces of the pericardium or the entire ablation of the pericardial sac are of the greatest importance to the future well-being of the child, but their full elucidation would lead us beyond the scope of this paper.

The ease with which compensation is effected in childhood is remarkable. The growth of all the tissues and organs of the body is provided for by nature, and most amply is provision made for the continuance of the heart in its functions during growth. When there is any derangement of the valves of the heart, and extra work is thereby thrown upon it, a compensatory hypertrophy of the organ occurs. Of course the increase in the size of the heart also interferes to some extent with the normal development of the lungs, but this is not of great import so long as the enlargement of the heart remains stationary. When, however, fresh endocarditis has been engrafted upon the old, or when some additional continued strain is put upon the already hypertrophied heart, it must either become more hypertrophied, undergo dilatation, or give way.

If the hypertrophy can not keep pace with the dilatation, precordial distress, dropsy, etc., supervene and the patient is in great danger. Children have the advantage over adults in that growth is with them a normal process, and the heart very easily accommodates itself to increased work; and also in the fact that they are not sufferers from various conditions found in adult life, such as the vices of alcohol, tobacco, tea, etc., that are obnoxious to a healthy circulation. But while hypertrophy and hence compensation are easily attained in childhood, yet no precautions should be neglected that tend to prevent endocardial or myocardial inflammation, for there is a limit even in youth to perfect adaptation to circumstances. Thus hypertrophy is nature's means of overcoming heart difficulties; but, while our therapy is directed toward securing an adequate compensation, dilatation is to be feared. It marks the failure of the heart to accommodate itself to its work, and will occur in all cases of heart disease if the patient lives long enough; but acute dilatation is likely to develop in childhood as the result of severe acute diseases, and must be guarded against in such cases as well as in typhoid fever.

The relation of heart disease to the growth and development of the child is an interesting phase of our subject, but one to which we can allude only briefly. The lack of development is manifested in the stunted growth, the markedly delayed menstruation, the failure of mental development, etc. This may in part be attributed to the anemia which so often accompanies heart disease, and which is due usually to the underlying rheumatic diathesis. Virchow has shown that there is an anemia that comes on about puberty, caused by disproportionate growth of the heart and blood-vessels; and there are also other causes for the anemia which should be taken into account. But aside from this we find many cases of tardy development that may be ascribed directly to the condition of the heart. Some children whose stature is not affected will show the evil effects of the heart disease in an unnatural and incurable leanness and thinness.

Functional disorders are not of so exciting a nature as the same condition in adults; not that children do not suffer from alterations in the rhythm, rate, and force of the heart-beat, but because they do not have the mental disquiet, the fear of heart disease, that make palpitation such a dreaded neurosis to the adult. The sources of functional derangement are practically the same in childhood as in old age, but the pulse of youth responds more quickly to excitement. Even during

sleep there may be variations in rhythm. If possible, however, the rate and other qualities of the pulse in babies should be ascertained when they are asleep.

In conclusion, I desire to call attention to the importance of a very slow heart action, or one in which the daily variation is excessive, as pointing to a meningeal inflammation, probably tubercular, from which children are so much more apt to suffer than are older people.

LOUISVILLE.

ETIOLOGY, DIAGNOSIS, AND TREATMENT OF HEPATIC ABSCESS.*

BY H. HORACE GRANT, A. M., M. D.

Professor of Surgery in the Hospital College of Medicine, etc., Louisville, Kentucky.

The question I wish to ask the Society to-night is, Have we as a profession grasped the practical promise in the management of abscess of the liver? I think not, and in the hope that I may present you something to clear up, I introduce the subject.

There is considerable information upon this subject, true enough, but this information is nowhere in our literature, as I can find it, profitably presented and digested. Most text-books, the recent as well as the older, refer to abscess of the liver as a rare affection, due to tropical climates and chronic dysentery, difficult of diagnosis and practically without promise as regards treatment. Recent current medical literature, with later understanding as to pathology, indicates a different belief. That a previous history of dysentery can often be obtained is true, and that perhaps preceding intestinal disease is almost always to be traced in one form is a part of the facts, but that form, I think we have reason to believe, is the least frequent. It is only my intention to speak of abscess of the liver as I have seen it and interpreted it in the five cases under observation in the last fifteen months. Four of these cases were verified by the aspirator; three were subjected to operation; one passed into other hands, and the fifth case, which rejected surgery, ruptured into the bowel, and death took place from exhaustion. Two of these cases pursued distinctly an acute course, and were in my judgment due to a direct infection; one through the common duct and one through the lymphatic and portal circulation.

As we understand acute infection, we know that aside from pyemic metastasis and acute virulent sepsis we do not have frequent or indeed probable lodgment of suppurating germs which may be circulating in

*Read before the Louisville Medico-Chirurgical Society, May 5, 1899. For discussion see p. 471.

the blood of a healthy individual. Consequently when such infections present, we look for the direct route. A moment's reflection shows the liver to be particularly liable. Direct communication is offered through the duct, not only for germs ascending from dysenteric ulcers (a rare condition) but also from many times more frequent diseases of the gall-bladder, the gall-duct itself, the stomach, and indirectly by lymphatic and circulatory connection, from peri-nephritic inflammations, to say nothing of direct kidney disease, inflammatory lesions in the thoracic viscera, septic lesions of the appendix, local peritonitis, and disease of the uterine appendages, etc.

It is the common explanation that septic and phlegmonous diseases of the gall-bladder originate from these sources, and there is no need to have a dysentery and the amebic germ of the colon to account for a fulminating cholecystitis. What, then, is the conclusion? Clearly that abscess of the liver is much more frequent than formerly supposed, and that it originates oftener from acute septic sources than long-standing and infrequent disease of the colon.

It is not intimated that these sources of infection are not known and accepted by all pathologists, but that their application too frequently escapes consideration, and the results are upon us without preparation. Why else is hepatic abscess overlooked so often? The diagnosis, if it be suspected, is not more difficult than that of pyosalpinx or extra-uterine pregnancy. Perhaps in the earlier stages of chronic abscess attention is not so directly drawn to the site of the lesion, but in ample time in the majority of cases reported signs were present which should have been correctly interpreted.

The symptoms of hepatic abscess are well described by Johnston* and Fontan.† Pain is a constant symptom of abscess of the liver, attended with tenderness on pressure, and often by its location indicating the site of pus. Respiratory movement and exertion of any kind increase the pain, and if there be any peri-hepatitis the sensation may be a very sharp one. Bad digestion, poor appetite, coated tongue, fetid breath, sluggish temperament, nausea, vomiting—which is often bile stained—with intestinal disturbances dependent upon the course of the disease, are always characteristic. Jaundice is not a symptom unless the duct be compressed, but the skin is sallow, as is usual in septic patients. The temperature is irregular, though in all cases some elevation is present at some time in the twenty-four hours, ranging from 99.5° to usually as much as 102°. Some days it may be found

* *Annals Surgery*, October, 1897.

† *British Medical Journal*, April 23, 1898.

subnormal and others perhaps 103° at the same hour the next day. Johnston regards subnormal temperature, if persistent or frequently repeated, as an important indication of hepatic abscess. Chills and sweats, as in other septic conditions, are a constant part of the history after the case has developed. The progress of the case may extend over a period of two or three months, as is more common in the tropical and dysenteric variety, or it may rapidly succeed an infection and develop in a couple of weeks. Sooner or later, however, there appears what Johnston declares as the most invariable symptom of hepatic abscess—enlargement. In all but one of the seventeen cases he reports a tumor is mentioned, and in that exception no statement is made concerning it. The enlargement is either outward, pushing out the ribs and often obliterating the intercostal spaces, or downward below their border. Usually it is most palpable. Fluctuation was easily made out in two of my cases. It is mentioned as a symptom in one fourth of those seen by Johnston. It is probably not an early symptom, and in abscesses deeply seated can not appear until a very grave constitutional condition has resulted from the long suppuration. The use of the aspirating needle is not approved by some surgeons, and while perhaps it is a little risky in trans-pleural puncture, even here a small needle and prompt operation if indicated can rarely, if ever, do damage. Ochsner condemns it because he has found it fail to reveal pus when it was really present, and thus masked the diagnosis. If the needle finds the collection, however, a good aspirator should not fail to bring signs of it to the surface, and if it can not find it, the risk of operation must be almost too great to justify. It has given most satisfactory returns in my hands, and in Johnston's cases seems to have succeeded well. It should, of course, be introduced at the point most indicated, which may be either below the rib or at about the eighth interspace, through both pleura and diaphragm.

The opinion generally entertained that the abscess should be allowed to become prominent before it is attacked is, I think, most unwise; not alone that such a course allows more septic intoxication and longer suffering, but it renders multiple abscess more likely, and auto-infection from such a source may be constantly repeated. The exploration and operation should be made as early as diagnosis is suspected and confirmed.

With the so-called subphrenic abscess, which is located in the spaces about the stomach on either side below the diaphragm, I have

had no experience. The causes and the symptoms are described by Waring* as much like those of acute septic abscess in the liver substance, except that, of course, the tumor may in some cases present on the splenic sides. The diagnosis by the aspiration and evacuation in the most favorable direction offer a more favorable prognosis than hepatic abscess.

We approach the subject of hepatic abscess, then, with an appreciation of a chronic, slowly growing form, and of a more acute septic infection with localization in the liver. We base the diagnosis upon a consideration that in the chronic form we have the history of tenderness, more or less constant pain, impaired appetite, coated tongue, burdened offensive breath, dull expression, irregular temperature, usually not very high and at times subnormal, with an occasional chilly sensation and sweats. These symptoms persist, with many variations, somewhat resembling an irregular course of typhoid fever, with moderate severity usually, for from two or three weeks to perhaps as many months before the prominence of the accumulation is distinctly made out. It is this form of abscess which we have been accustomed to consider as due to tropical climatic influences and diseases of the bowel; and for the reason of its slow growth the diagnosis has not been made usually until such exhaustion existed as to render operative treatment practically of little service. In the acute form the tenderness and pain follow an attack resembling typhoid fever, more severe than the above, with frequently a history of diarrhea, gastric disturbances, and an irregular temperature, ranging oftentimes as high as 105° . The tongue is usually red and frequently clean. A little later chills and hectic, and the more pronounced irregularity in the temperature, with the other indications of an acute septic disease, pursuing a much more rapid and severe course. Here, too, a tumor usually forms in from four to five weeks at the latest, frequently earlier, and in one case under my observation succeeded apparent perfect health in two weeks. Fluctuation is more common in the acute abscess. The confirmation of the suspicion by the use of the aspirator should be early employed and the treatment promptly instituted.

The details of the surgery will not be taken up at this time, but the outline of the operative steps may be briefly indicated. If the exploration is to be made through the peritoneum, of course controlled by the situation of prominence of the tumor, the incision down to the liver is stopped at the surface of that organ until the existence of firm adhesions

*Brit. Med. Journal, March 12, 1898.

is made out. If there are no adhesions the operator may wall off the cavity and then follow the aspirating needle with a bistoury into the abscess cavity, wash out and drain. Better, I think, and the plan I have twice followed, is to pack the wound when the liver is reached, and wait thirty-six hours until firm adhesions have formed. Then incise and perhaps curette and drain in safety. If adhesions are found at the first incision, of course no delay is necessary. The hemorrhage after division of the liver walls, if the cavity is deep, may be troublesome, but it yields to sutures or packing. If the abscess is single, success will follow a large percentage of chronic abscesses so treated. In the acute septic form the prognosis is less hopeful. Perhaps 60 per cent of abscesses are more accessible through the diaphragm. These are reached after the use of the aspirating needle by excising a part of the eighth or ninth rib, and if the pleura can not be peeled off the ribs and diaphragm, carefully incising it and sewing the costal to the diaphragmatic portion, thus shutting the pleura off from certain infection, then incising the liver through the diaphragm, and, if possible, stitching the liver wound to the diaphragmatic opening; after this, irrigation and drainage constitute the treatment. In multiple abscess a recurrence of the symptoms will indicate pockets which have not been reached. Such cases will usually resist any form of surgery, but of course, if the accumulation can be found, the same rational surgical treatment is indicated.

The prognosis in single abscess of the liver, in which severe sepsis is not present, and where treatment is promptly instituted and carefully carried out, is believed to indicate recovery in at least 75 per cent.

I will report the following cases:

CASE 1. Mrs. S., aged thirty-five years, was attacked with what seemed to be an acute dysentery, but which ran a chronic course. It must have been five or six weeks before from the continued fever, pain in the liver, and general evidences of pronounced constitutional disturbance, sweats, and emaciation led to the appreciation of a tumor in the right hypochondrium. Exploration was not made in this case, because the patient declined all surgery, but five days after it was suggested there was a profuse discharge of pus by the bowel, and in about two weeks the patient died of exhaustion.

CASE 2. Miss K., aged thirty-one, presented many of the indications of chronic tuberculosis, except that the physical signs were not pronounced. She had a cough, emaciation, slight elevation of temperature,

but continued as an office patient for some two months before a tumor was discovered. As soon as possible after its discovery she was removed to the infirmary; a portion of the eighth rib was excised and the pleura stitched as described, so as to shut off the lung from infection, and the abscess incised through the diaphragm. The knife was made to follow an aspirating needle pushed into the tumor. A large amount of chocolate-colored pus was evacuated and the abscess washed out. Though the temperature remained down after the operation, the profound sepsis from which she suffered was never overcome, and she died exhausted on the eleventh day. Drainage was kept up throughout the case.

CASE 3. Mr. F., aged thirty-seven, was treated for what was supposed to be typhoid fever of moderate severity. In the fifth week his physician detected a tumor in the region of the liver, his attention being called to it by the continued pain which the patient suffered in this region. This man had a red tongue, a temperature varying in height from subnormal to 104° . His intelligence was perfect, never had any delirium, and his appetite was fair. The tumor presented most prominently below the ribs. Incision was made upon an aspirating needle, the wound packed, and adhesions waited for; on the third day the wound was opened and the abscess drained and irrigated. The patient did well for ten days or more, when his symptoms again became those of sepsis. Various attempts were made to find new pockets, but the drainage seemed always imperfect. He died five weeks after the operation from exhaustion and sepsis. A post-mortem examination disclosed multiple abscess in both lobes of the liver.

CASE 4. Man, aged forty years, presented the symptoms of appendicitis, with pain and tenderness. I saw him after he had been sick three weeks; there was an appreciable tumor, and aspiration disclosed pus. After a suggestion of an operation he passed into other hands and was subjected to an operation a little later, and died in a week or so from exhaustion.

CASE 5. Boy, aged nine years, whom I saw on the sixth day of what was supposed to be an attack of appendicitis. There was a pronounced tumor in the right iliac fossa and tenderness at McBurney's point. His pulse was 120, and temperature 102° . This boy was sent to the infirmary and kept under observation; his symptoms improving, operation was deferred in order that the adhesions might become more firm. He improved so much that he was able to sit up at the end of the week,

though his temperature was never below 99° and usually 100° by evening, but about this time began to complain of pain in the region of the liver, and on the eighteenth day from his original attack were found evidences of a tumor with fluctuation. The aspirating needle disclosed pus, and an incision was made down upon the liver. During that night he coughed up two or three ounces of pus resembling that taken up by aspiration. Next day nearly a quart of pus was evacuated, a drainage-tube was introduced, and within three weeks the boy was practically well. He continued to occasionally spit up some pus on coughing, and to relieve this, incision and drainage by pleura was made. The causation of this abscess was undoubtedly secondary to the appendicitis, and as this boy was in apparently perfect health three weeks before the formation of the abscess, there is little likelihood that there was any focus in his liver before the acute attack; and there was distinctly no source of the infection aside from the appendicitis.

Case No. 1 was doubtless an infection of the liver, secondary to disease of the small intestine or perhaps of the colon.

Case No. 2, the source of infection is not so easily made out. There was no diarrhea and no history of dysenteric trouble previous to this time. Just what the origin of this abscess was I am not able to say; doubtless an infection by bowel.

Case No. 3 was undoubtedly a direct infection, most likely from the typhoid fever.

Cases Nos. 4 and 5 are apparently traceable to appendicitis. It is my belief that abscess of the liver, if looked for, will be found more frequent than we have hitherto believed, and also that it will be often discovered as a complication of acute and chronic septic infections of the adjacent viscera.

LOUISVILLE.

PERITONITIS FROM A CLINICAL STANDPOINT.*

BY AUGUST SCHACHNER, M. D.

Professor of Surgery, Louisville Medical College.

Practically speaking, peritonitis is as old as the healing art, but old as the subject is, there yet remains much to be understood about peritonitis and the peritoneum. In the settlement of all unsettled subjects, and certainly peritonitis is entitled to a membership in this class, it is well to pause from time to time in order to thoroughly digest the additions that have been made; to compare the old with the new, to

* Read before the Kentucky State Medical Society at Louisville, May 18, 1899.

emphasize the important over the unimportant, and, in short, to have a "round up," so to speak, from which another advance can be made. This is the object of the present paper, and for this reason it is a somewhat disconnected presentation of facts bearing upon peritonitis rather than systematic essay upon the subject. The classification of peritonitis may be based upon its causation or its pathology. Considering its causation, it has been divided into primary, secondary, and specific. Viewing it from the standpoint of its pathology, the classification of Pawlowsky is perhaps the most accurate, namely:

1. An extremely toxic variety, in which the virulence of the infecting organism is so great that the patient is at once overwhelmed and dies within forty-eight hours with all the signs of shock. In these cases the peritoneum is covered with a slimy fluid containing a few blood-corpuscles, fibrin flakes, and many bacteria.

2. Hemorrhagic peritonitis, in which the virulence of the infection is also very great. Varying grades of hemorrhagic extravasations, with a greater or lesser mixture of pus and masses of bacteria, are found.

3. Fibrino-purulent peritonitis, due to a less intense or slower infection, characterized by masses of fibrino-purulent matter, consisting principally of pus-corpuscles and bacteria contained in the fibrin masses.

4. Purulent peritonitis, consisting of much pus and fluid matter.

The possibility of a primary or an acute idiopathic peritonitis, either with or without the presence of pus, is extremely interesting. According to most authorities, the purulent form at least never occurs. Even where pus is not present the existence of peritonitis is held by the majority as an evidence of some other trouble within the peritoneal cavity, and upon which the occurrence of the peritonitis is dependent. If we consider, however, that in the early stages of the embryo the thorax and abdomen are represented by one common cavity known as the pleuro-peritoneal cavity, and only by the advent of the diaphragm are these cavities separated, we can readily see how difficult it is to reconcile ourselves to the impossibility of an idiopathic peritonitis when the pleura, which is only a part of the original peritoneum, which has been separated by the diaphragm, is so commonly subjected to inflammation with or without the occurrence of pus. Some might contend that the arrangement above the diaphragm is responsible for the very common idiopathic attacks of pleuritis as compared with the questionable idiopathic peritonitis below the diaphragm, namely: The

influence of the proximity of the lungs from within the thorax and the exposure to changes from without. But this is offset by the proximity of the peritoneum to the alimentary tract filled with a variety of organisms and the seat of constant chemical action, together with the same external influences that hold good above the diaphragm. Since the causes ascribed to idiopathic peritonitis, namely, exposure to cold and rheumatism, are quite unsatisfactory and apply with the same force above as below the diaphragm, it leaves the question in any thing but a settled condition.

The secondary variety always follows some primary lesion, usually a perforation of some of the hollow viscera.

By the specific variety it is usually understood as meaning tubercular peritonitis. From the masterly contribution upon intra-peritoneal drainage by Dr. J. G. Clark, of Baltimore, I have taken the following abstract:

"According to Wegner, the peritoneal surface measuring 17,182 square centimeters is practically equal to the skin surface, which measures 17,502 square centimeters. Its absorbing capacity enables it to take up three to eight per cent of the entire body weight within an hour. Under the influence of toxic or irritant substances an equal transudation into the peritoneal cavity may take place.

As the final results of a series of experiments, Muscatello concludes that the diaphragmatic part of the peritoneum is the only place where the lymph from the peritoneal cavity is absorbed, and the lymph-glands of the mediastinum are the collecting organs for this area.

Recklinghausen investigated the mechanism of the absorption of fluids in the peritoneal cavity of rabbits, and affirms that the fluid is taken up through the stomata between the endothelium of the diaphragmatic peritoneum.

To summarize, the points in the anatomy and function of the peritoneum which bear upon the subject of intra-peritoneal drainage and the etiology of peritonitis are as follows:

1. Fluids and solids may pass through the endothelial layer of the peritoneum, the fluids in many places, the solid particles only through the spaces in the diaphragm.

2. Minute solid particles are carried from the peritoneal cavity through the diaphragm into the mediastinal lymph-vessels and glands, and thence into the blood circulation, by which they are distributed to the abdominal organs, to appear later in the collecting lymph-glands of these organs.

3. Large quantities of fluids may be absorbed by the peritoneum in an astonishingly short time.

4. The leucocytes are largely the bearers of foreign bodies from the peritoneal cavity, which carries fluids and foreign particles toward the diaphragm, regardless of the posture of the animal, although gravity can greatly favor or retard the current.

Grawitz took up the experimental study of infection of peritoneum, pursuing his work under improved bacteriological technique. The results of his investigations, which appear to have been very thorough, were as follows:

1. The introduction of non-pyogenic organisms into the abdominal cavity, either in small or large quantity, or mixed with formed particles, produce no harm.

2. Great quantities of organisms, which ordinarily produce no disturbance, may give rise to a general sepsis if the absorptive ability of the peritoneum is impaired.

3. The injection into the peritoneal cavity of pyogenic organisms may be quite as harmless as the non-pathogenic varieties. In these experiments he employed a flocculent emulsion of staphylococcus albus, staphylococcus aureus, and streptococcus pyogenes in ten cubic centimeters of water without any visible reaction.

4. The introduction of pus-producing cocci into the normal peritoneal cavity produces a purulent peritonitis (*a*) if the culture fluid is difficult of absorption; (*b*) if irritating material is present which destroys the tissues of the peritoneum, and thus prepares a place for the lodgment of the organisms; (*c*) a purulent peritonitis will certainly be produced if a wound of the abdominal wall is present, which forms a nidus for the infectious process.

The experiments of Cobbett and Melsome make more prominent the fact brought out by previous observers, that even after the injection of virulent streptococci little or no peritonitis may be produced if the peritoneum is normal.

From the collective literature the following conclusions may be drawn:

1. Under normal conditions the peritoneum can dispose of pyogenic organisms in varying quantities, depending upon the virulence of the organism, without producing peritonitis.

2. The less the absorption from the peritoneal cavity the greater the danger of infection.

3. Solid sterile particles are partly absorbed, and the remainder is encapsulated without the production of peritonitis.

4. Death may be produced by general septicemia, and not peritonitis, where large quantities of organisms are taken up by the lymph streams.

5. Peritonitis may be produced if the culture fluid is difficult of absorption.

6. Irritant material which destroys the tissues of the peritoneum prepares a place for the lodgment of organisms and the starting-place for peritonitis.

7. An infected stitch-hole tract or localized phlegmon communicating with the peritoneum forms an excellent starting-place for general peritonitis.

8. Stagnation of degenerated fluid in dead spaces favors the growth of organisms.

9. The presence of infected blood-clots is especially liable to cause a virulent peritonitis.

10. Injury to the abdominal viscera, such as strangulation of an intestine, constriction and ligation of large areas of tissue in the presence of pyogenic organisms, will almost certainly be followed by peritonitis."

Mr. Lawson Tait, in a presidential address published in the *British Medical Journal*, November 12, 1892, expresses in his usual style some interesting views upon this subject. Speaking particularly of post-operative peritonitis, he favors the idea that peritonitis is largely dependent upon the nervous system. He believes that there is an ebb and flow in the peritoneum, and that the great omentum is the arbiter of these intra-peritoneal currents. In support of these ideas he mentions the peculiar behavior of ascites dependent upon papillomatous disease of the peritoneum. The cause of death is the disturbance of the ebb and flow of the serum stream of the peritoneum and the disturbance of the function of the liver. He believes the liver to be the lethal organ in peritonitis. That the intra-peritoneal flow is checked is indicated by two things: First, the peritoneum is dry and free from effusion in proportion to the acuteness of the attack. The second point is the increased quantity of biliary fluid thrown off by the liver, as being due to the increased quantity of fluid passed into the portal circulation by the arrest of the intra-peritoneal flow.

The foregoing are but disconnected links in the somewhat broken chain that represents the pathology of peritonitis. Some of these links

stand out in bold relief. Absorption and transudation are admitted upon all sides, and this admission clinches the idea of certain intraperitoneal currents. The currents in all likelihood move toward the diaphragm. In fact, if we take a rough glance at the anatomy of the human subject divested of its extremities, we see the trunk in the form of a cylinder divided into unequal halves by the diaphragm and covered externally by a highly absorbent membrane on the outside called the skin, and by a still more highly absorbent membrane on the inside called the peritoneum. In fact, the absorbing capacity of the peritoneum is such that it must be referred to as a colossal lymph sac in order to fully grasp the meaning of peritonitis in all its details.

Treatment. In considering the treatment of peritonitis, we deem it best to divide it into the post-operative, purulent, and specific, rather than to employ the classification already laid down; since we are not always able at the time of treatment to say as positively the character of peritonitis we are dealing with as we are after an ante- or post-mortem section has been made. Again, the post-operative peritonitis carries with it a clearer idea as to its causation and internal relations, and has prophylaxis as the uppermost feature in its management. The purulent peritonitis is generally more obscure as to its causation and internal relations, and carries with it the idea of active interference.

The specific, or more properly speaking tubercular, since the latter practically represents specific peritonitis, requires the proper classification before we are able to say which cases should be subjected to and will be benefited by an abdominal section, and which should not be and will be hastened to their end by operative measures.

The paper of Mr. Tait, already referred to, while containing some features that are at variance with many well-accepted ideas, is nevertheless based upon an extraordinary experience, and, coming from one of our ablest clinicians, it merits our critical attention. The keynote of the paper is prophylaxis during and after the operation. We all know that while Mr. Tait does not accept Lister's teachings scientifically, he does so at least practically. However, for the prophylaxis during the operation we can obtain clearer ideas from the contribution of Dr. Clark, already referred to in this paper. Mr. Tait considers a thoroughly developed case of post-operative peritonitis as about as hopeless a condition as one can possibly meet, therefore he fights it most vigorously at its earliest onset, and prevents rather than attempting to cure. He goes on the principle that unless it is recognized in its

incipiency there is no need of its recognition at all, for the patient is soon beyond redemption. He practically discards temperature and pulse, and relies almost wholly upon the appearance of distension and the alteration of the face. One does not need an extensive experience in abdominal work to realize the uncertainty of the temperature as an index to danger, but we doubt if Mr. Tait's disregard for the value of the pulse as an index of trouble would meet with any considerable support. The slightest evidence of distension in the infra-sternal triangle is looked upon as a sign of trouble. In justice to Mr. Tait it must be said that he expressly mentions that the appearance of distension is not necessarily conclusive evidence of peritonitis, but by considering it in that light and shaping his action accordingly, he gains valuable ground if it should be due to a commencing peritonitis, and would lose nothing if it were not so. In short, he is more interested in protecting his patient than he is in verifying his suspicions.

The alteration of the face, which is of greatest importance, is not one of pain, but one of anxiety. To use Mr. Tait's own words, "If she is quiet and will not talk, she is sure to get well; if she persistently chatters, she is sure to die; on relief of the symptoms, which means getting the bowels to move, the face becomes placid and the patient is quiet." From this we are enabled to sum up the treatment of post-operative peritonitis in the following words: Excluding as much as possible the infection and preserving as much as possible the integrity of the peritoneum during the operation, and maintaining as much as possible the intra-peritoneal drainage after the operation.

The first two of these three directions carries us into the conditions underlying the infection of wounds, an immense subject in itself, and the last means maintaining the free and unrestricted functions of the intestinal tract.

The treatment of purulent peritonitis, and by this term we mean cases of the third and fourth variety of Pawlowsky's classification, since the cases of the first and second are too rapidly fatal to admit of any interference, is not developed sufficiently to formulate hard and fast rules governing all cases. The degree of success attending the treatment of these cases will always depend upon the judgment exercised and the thoroughness with which the surgeon does his duty. Too much stress can not be laid upon the frequent inexcusable delay in calling in the surgeon. Frequently the surgeon's work amounts to nothing more than an ante-mortem examination and irrigation of the

abdominal cavity. Operative interference must be undertaken before the patient is in extremis, and even then a properly worded prognosis should be expressed in order to prevent misleading ideas that constantly arise regarding surgery in general and the operation in particular. It is like operating for typhoid perforations—any percentage of recoveries, however low, is a credit to surgery and a triumph for the surgeon. The recently reported successes of McCosh, McBurney, Abbe, Van Arsdale, and others should give encouragement to efforts in this direction. The question upon which there seems to be a division of opinion relates not so much as to what is to be done as to the manner of doing it.

Some favor a large, free incision with complete evisceration and the thorough irrigation of the peritoneal cavity and the eviscerated intestines with normal salt solution having the temperature of 115° F. Others rely upon irrigation with enormous quantities of hot salt solution without evisceration. Some favor multiple incisions and the introduction of a number of drainage-tubes or gauze, and others rely upon one large incision. But it is self-evident that the method must be suited to the case, rather than suiting the cases to the method. Another mooted point is the propriety of removing the deposits of fibrino commonly found covering the intestine. Many contend that nature is able to cope with these, and their removal only opens up new avenues for the entrance of infection. Some favor mopping the peritoneal cavity with gauze wrung from hot salt solution in preference to cleansing by irrigation. Dr. Andrew McCosh has suggested the very excellent idea of an intra-intestinal injection of one or two ounces of a saturated solution of magnesium sulphate, the injection being made into the small intestine, this being supplementary to a cleansing of the peritoneal cavity.

Recently Van Arsdale recommended, in addition to the usual measures for cleansing the cavity, the suturing of an incised knuckle of intestine to the abdominal incision, the advantage being that it affords an opening for the escape of gas and fecal masses, the latter doing harm by their stagnation and putrefaction. It is also a protection against obstruction that might occur through angulation or compress by the drainage-tube or gauze.

According to Frederick Trevis, operation for tubercular peritonitis is contra-indicated in the cases of general acute miliary tuberculosis; it has also proved to be of no avail in examples of acute miliary tuberculosis limited to the peritoneum. In subacute and chronic forms,

operation has been attended with good results. In cases of generalized peritonitis the best results have followed simple incision, without either flushing or drainage. The cases treated by irrigation show 72.5 per cent of cures; those not irrigated show 74.3 per cent of cures. Drainage is not necessary.

The statistics of Roersch, which present 358 operations: Of these, 20, or 5.59 per cent, died as the result of the operation, 51 died a few weeks later of other tubercular trouble, and 250, or 70 per cent, were cured; 118 were kept under observation six months or more, 79 a year, and 53 two years longer.

LOUISVILLE.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, May 5, 1899, the President pro tem., John G. Cecil, M. D.,
in the chair.

Enucleation of the Eye. Dr. T. C. Evans: On last Thursday a case was referred to me for enucleation of the eye which presented a rather peculiar history, with a rather trifling cause which led up to the necessity for radical treatment. The man gave the history that he was a railroad fireman, and seven weeks ago he got a cinder in his eye. The patient was referred to my clinic by Dr. Cheatham, stating that it was a case for enucleation. At the time I saw the patient he was suffering from a large abscess of the conjunctiva and also a hemorrhage into the anterior chamber. He stated that seven weeks ago on one Monday morning he had gotten a cinder in his eye, which had remained until Thursday; he went to consult the company's physician at one of the small towns in the State, who attempted to remove the cinder and thought he had removed it. The eye still pained him, but he did nothing further, as he was coming to Louisville, where he lives, and upon arrival here six days after the cinder had gotten into his eye his wife said she could still see the cinder, and after that he waited another twenty-four hours, making eight days, when he consulted Dr. Cheatham. At that time an abscess had already formed in the eye. The infection had spread almost over the entire cornea, the eye was shrunken, and the entire anterior chamber seemed to be filled with a

*Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

hemorrhage. Pain was violent, the man had no vision in that eye, the eye was of no service, with no prospect of getting vision, and enucleation was indicated, not only to try and prevent sympathetic ophthalmia, but to get rid of almost intolerable pain which kept him awake, and this pain was not relieved by any of the usual applications.

I did not make a very close examination of the eye previous to the enucleation, which was done last Thursday.

I mention the case simply to show that even in these trivial wounds, which usually get well without any trouble, we sometimes see infection take place and the eye destroyed in a short time.

Discussion. Dr. J. M. Ray: I sent the man back to Dr. Cheatham the day that Dr. Evans enucleated the eye. Dr. Cheatham, I believe, saw the patient first, and referred him to the Sts. Mary and Elizabeth Hospital, where he came under my charge. When I first saw him there was a large area of infiltration of the cornea; the anterior chamber was half filled with pus. I evacuated the pus in the anterior chamber; the man became very much better for four or five days; the anterior chamber reformed with slight recurrence of the pus; then the cornea began to slough at the site of the foreign body, and he then began to have hemorrhages into the anterior chamber. The day I referred him back to Dr. Cheatham the corneal ulceration had perforated and the iris prolapsed.

The history he gave me was that he had gotten a foreign body in his eye; that somebody had tried to get it out several days later. At one time I was rather encouraged after I had evacuated his anterior chamber and the anterior chamber had reformed, and I was in hopes he was going to recover with simply an opaque cornea without adherence of the iris; but the area of corneal infection seemed to necrose, the anterior chamber became obliterated, the iris fell into the rupture, and the eye was going to the bad.

I have seen two or three cases of the kind in which eyes have been lost from an ordinary cinder with corneal infection following. I presented one case before a meeting of the Louisville Ophthalmological and Otological Society not long ago. Another was a man who worked in a factory in South Louisville, and who lost his eye in the same way.

Case of Diphtheria. Dr. F. C. Wilson: I attended a case of diphtheria some time ago, the patient being a mother with a very young child. The question arose as to whether the child should be separated

entirely from the mother after using antitoxin as I had in the case, and I decided to run the risk, hoping that the absorption of the antitoxin through the milk would be sufficient to immunize the child, which I believe it did. I injected the mother with antitoxin three times. While the child was not kept in the room, it was taken to the mother to be nursed at regular intervals, and I am satisfied enough antitoxin was received through the milk to immunize it. The child was five weeks old.

Discussion. Dr. Louis Frank: As to the question of antitoxin and its effect in immunization, I doubt whether or not antitoxin can immunize taken by the child through the milk of the mother, whether it would be excreted in the milk, or even secreted by the mammary gland; again, it is questionable whether the material which immunizes would be taken from the milk in such condition as to produce immunization in the child. I do not remember to have seen any reports of experiments along this line, and should consider it very improbable. I believe that the child merely escaped infection, perhaps on account of its tender age rather than any immunity which was conferred by antitoxin in the milk. I would like for some of the gentlemen present who have been using antitoxin extensively to speak upon the subject, as it is one of considerable interest and deserves some discussion.

Dr. F. C. Wilson: It seems to me that the possibility of the milk becoming affected by the antitoxin is not at all improbable. Everyone who has had much to do with children (babies) has taken this method of medicating them over and over again. It is well known that we can affect the child by medicines given the mother. I have seen that time and again, and do not see any reason why the child should not acquire antitoxin, to some extent at least, through the milk, because we know that the milk is affected by what is taken by the mother. We see that in the ordinary purgatives; every time the mother takes a purgative the child is affected by it. As far as infection of the child is concerned in this case, there was great probability of it; it was taken to the mother regularly every two hours to be nursed, the child was in close contact with the mother, and the probability of infection under such circumstances is exceedingly great. The question of complete isolation was a hard one for me to decide; that is, whether to take the child entirely away from the mother and run the risk of sustaining it by artificial feeding, or take the chances of allowing the mother to nurse it

with the hope that antitoxin through the milk would be effective. The latter method was determined upon, and the mother has recovered without the child's having contracted the disease.

Dr. Wm. Bailey: The question under consideration is of considerable importance, as to the effect of a drug given to the mother upon the infant. I think it depends largely upon the fact whether or not the medicinal agent is separated from the blood by the mammary gland. This is not the case with all drugs. I think some of the purgatives will give a purgative action, but I doubt if every thing that the mother takes impresses the milk. We know that in the lower animals some of the vegetables have a deleterious effect upon the milk. For instance, cows sometimes spoil their milk by eating weeds which are not proper for them, etc., showing that the mammary gland separates many things from the blood; but I would not argue that the child had been made immune by antitoxin given the mother because it did not have diphtheria, for the reason that children at the breast, so young as this one, are not liable to have diphtheria, and we should go slow in drawing deductions from a case of this kind. It ought to be determined first whether the milk has any antitoxin in it; if so, then we might argue immunity; otherwise I should doubt very much such influence being given from the mother to the child under the circumstances related.

Dr. T. C. Evans: I have had some little experience in the use of antitoxin in diphtheria, and also in regard to separating those having the disease. I have always made it a rule, although I can not say it is a wise one, that children under one year of age are left in the house with children who have the disease, and I have never known an infant to have the disease under such circumstances, although I have seen one or two cases of diphtheria in children under one year old. I have never seen a case of diphtheria in a child under six months.

In regard to antitoxin immunization: After the child gets it into the stomach you still have to run the risk of getting it absorbed as antitoxin. I am skeptical about the effect of antitoxin when given by the stomach. It has not been demonstrated that antitoxin is secreted by the mammary gland from the blood, nor that the milk from a mother who has been given antitoxin by hypodermic injection or otherwise will produce immunity from the disease in her infant.

Another point is that all children who are exposed to diphtheria do not take it. I have repeatedly seen one or two cases occur in a family of five or six children where it was impossible to separate them, and no

other cases would develop. So it would take a large number of cases of this kind to prove that the immunity was from antitoxin contained in the milk of the mother.

The essay of the evening, "The Etiology, Diagnosis, and Treatment of Hepatic Abscess," was read by H. Horace Grant, A. M., M. D. [See p. 453.]

Discussion. Dr. F. C. Wilson: The most interesting case included in Doctor Grant's series is the one where the patient coughed up some material which is described as resembling that drawn out by the aspirator. I have seen several instances of this kind where I was satisfied that an abscess of the liver ruptured through the diaphragm, the pus making its exit through the lung. This might have been confirmed possibly by microscopic examination of the pus, and recognition of liver tissue or liver cells mingled with the pus. This would have been an important factor in confirming the diagnosis. I am satisfied that some of these abscesses do evacuate themselves in this way. I have seen three or four cases where I was satisfied that the expectorated matter through the lungs had its origin in the liver. In one case it was confirmed by the microscope. I have seen several instances where prompt recovery followed incision and drainage of the abscess. I have seen several instances, too, where immense abscesses were only discovered in the post-mortem examination, and it does seem that these cases ought not to be overlooked; careful examination, or even the use of the aspirator exploring needle, ought to discover the abscess if of any size. Of course multiple abscesses may escape detection, and these are really the most dangerous cases, simply because they are not detected. If the abscess has continued for any length of time and has made its way toward the surface, most likely adhesions will have formed by the time the incision is made, then there need not be any further delay. The course that Dr. Grant took is the one that is safest always, inducing adhesions by packing the wound that is made simply through the abdominal wall down to the peritoneal covering, then allowing sufficient time for adhesions to form before completing the operation. The ultimate result will depend very much upon the amount of liver tissue that has been destroyed. If it is a large amount, of course danger will be correspondingly great; yet I have seen several cases of abscess of the liver that recovered, although the abscess

contained fully a quart of pus, which means that it embraced perhaps more than half of the substance of the liver, which had, of course, broken down, yet recovery took place.

Dr. Louis Frank: I have seen three or four cases of abscess of the liver, but they have all been at autopsies except one, and that one was seen eleven years ago in the hospital here. The patient was operated upon, and it proved to be multiple abscess, and the man died.

In listening to Dr. Grant's paper there were two or three things with which I was particularly struck, and I think Dr. Grant does himself and his statistics an injustice in not having made autopsies upon the patients that died. In all those cases that died I think he would have found multiple abscess, and that the abscess was due to infection from other sources than the ameba coli. Where the abscess is multiple, little is to be hoped from operative interference. It is a question with me whether these cases should be operated upon, because we can not tell how many abscesses we have, and it means that we must open one after another or the case will go on to a fatal termination.

Again, it would have been of interest if examination had been made of the stools in all these cases. I certainly think this is a point that should not be overlooked; even if we recognize that we have a case of abscess of the liver, we should search the stools for the presence of the ameba coli. In all cases of tropical abscess they have been found, though I recognize the fact that we may have liver abscess from other causes, such as typhoid fever, or even from inflammatory changes in the ducts themselves, or from micro-organisms which may travel upward from the intestines, particularly the bacillus coli communis.

Dr. A. M. Vance: I have not had very much experience with these cases. I believe abscess of the liver is very often mistaken for abscess in the pleural cavity. I have seen one or two cases that proved to be abscess of the liver, where the first evidence of tumefaction was up under the arm, and all of them have died. I have seen but one case operated upon that got well. That was a case introduced to this Society by Dr. Stucky some years ago, and afterward operated upon by Dr. Cartledge and again exhibited. This man had a very large tumor in the median line, and a good many different diagnoses were made. Operation proved it to be an abscess of the left lobe of the liver with a single sac, and the man recovered without a bad symptom.

I agree with Dr. Grant that these cases should be treated along surgical lines; when we can determine that there is an accumulation of pus we ought to evacuate it. I agree, too, with Dr. Frank that where there are multiple abscesses there is very little hope, but I believe we ought to open these when they are prominent or large enough to be seen, and give the patient the benefit of the doubt.

I have seen one or two cases of abscess of the liver complicating surgical sepsis where I believe the pus was liberated by nature through the bronchi. One man I operated upon for hernia; he had a strangulated hernia, and subsequently developed marked sepsis, and finally evacuated a great deal of pus through the bronchi. The man was very hard to control, and went to another State. I do not know whether he finally recovered or not.

In my experience fifty per cent of abscess of the liver seek outlet upward rather than showing below the ribs.

Dr. L. S. McMurtry: Dr. Grant has had an exceptionally rich experience with abscess of the liver and its surgical treatment, and certainly his paper is a very complete exposition of the subject.

One point that has not been mentioned is how rarely does suppuration in the gall-bladder produce abscess of the liver. I have operated in a number of cases of suppurative gall-bladder due to the presence of stones and impaction, and in not one instance was there any suppuration in the liver substance. This would tend to indicate that the infection travels by vascular routes rather than by continuity of the mucous surfaces in the immediate vicinity of the gall-bladder.

In regard to an opening through the lungs, I think that it is the most favorable route of all for spontaneous cure. I believe more cases recover where the abscess communicates with the bronchial tubes and are emptied in this way than where they empty into the intestines or otherwise.

The surgical treatment of hepatic abscess is promising; with increased experience and improvement in operative technique, there will be better results from operation. Of course, as has been stated, when multiple abscess occurs there is little to be expected from operative interference.

I saw Dr. Grant operate upon one of the cases he has reported where it was apparent after he had emptied one abscess sac that there was somewhere else a suppurative focus, but repeated efforts did not disclose the site of this abscess; and at the same time I was impressed

by how little the patient was injured by repeated exploration. A careful exploration does not seem to do any harm, and I think in these cases it is a good plan, when the septic process persists and the patient's condition grows progressively worse, to make repeated efforts to find the suppurative focus and evacuate it.

The paper is a very thorough and complete one, and embraces one of the most instructive studies of the subject that I have ever heard.

Dr. T. S. Bullock: I have seen two cases of abscess of the liver that got well, and both of these ruptured into the bronchial tubes. My experience is in accord with both Dr. Vance and Dr. McMurtry, that the most favorable route for exit is through the bronchi. I have never operated for abscess of the liver, and have never seen one get well except the case referred to by Dr. Vance, operated upon by Dr. Cartledge. Dr. Vance and myself had one case that we aspirated several times a good many years ago, but at that time we had not gotten up to the radical operation for hepatic abscess. This was a chronic case, and a great deal of fluid was evacuated in each aspiration, but the woman finally died. Whether the result would have been different by a more radical operation I am unable to say.

Dr. J. G. Cecil: This subject is one of great interest to me, and was emphasized many years ago by a case that I had in the City Hospital in a negro woman who died from an unknown disease, as far as I was concerned at any rate, and post-mortem examination revealed an abscess of the liver about the size of a cocoanut. This was quite a lesson to me, and one which I have never forgotten, consequently abscess of the liver since that time has been very interesting to me. My attention has been drawn more particularly to the medical aspect of the question in later years, and I think the general consensus of opinion of medical writers is that tropical or solitary abscess is very much more amenable to treatment than the so-called suppurative or multiple abscess. This is borne out by what has been stated in Dr. Grant's paper. These tropical abscesses, I believe, as has been stated by Dr. Frank, are invariably caused by the ameba coli, and where there is any doubt as to the nature of the abscess, even though we do not live in the tropics, much light may be thrown upon these cases, obscure as they are, by a bacteriological investigation of the stools, and that would have a very decided bearing upon the course which would probably be indicated. Where it is evident, rather where it is apparent, that an abscess of the liver is secondary to a suppurative process anywhere in the bounds of the

portal circulation, even in these cases I think this investigation ought to be made, because if the ameba coli are determined not present, then the inference would be that it was of bacterial origin, and the case would be less amenable to treatment. It is evident, of course, that one abscess, be it never so large, is much more amenable to treatment than many abscesses. The belief, as I have obtained it from my own experience and from a study of medical authors particularly, is that when the abscess of the liver points in any direction, it ought to be opened in that direction; and I think the statistics of English and Indian authorities, where this disease is so very prevalent, show that discharge through the colon is most satisfactory and safest, while discharge through the bronchial tubes is frequently followed by a cure. When an abscess of the liver has determined its own course and has discharged, it has also been thought wisest to let it alone and take the chances, unless it is very evident that by operation it can be evacuated more thoroughly. Generally, however, statistics will prove if the abscess is discharging in any direction, if let alone, it is safer by nature's process than by any aid that can be extended. In my opinion, and this is also borne out in the statistics quoted by Dr. Grant, multiple abscesses are practically incurable; and if I had a case in which I could determine that multiple abscesses of the liver were present, I should decline any thing in the way of a surgical procedure. The chances by nature's process would be just about as good or perhaps better than any other way; but in tropical abscess I believe there is a great field for operation, and the outlines of the operation indicated by Dr. Grant strike me as being exceptionally good. Still, if an abscess in my hands were pointing in any particular direction, I believe I would follow that as a guide and operate at the point of least resistance, where it was undoubtedly nearest to the surface. That would mean, of course, that it might point in the lower part of the liver space in a great many cases as well as upward. It is a fact, I believe, that has been determined by a great many examinations, that tropical abscess is, in a large proportion of cases, found in the right lobe of the liver, and I might say more correctly in the upper portion of the right lobe of the liver, near the upper surface, and consequently we find many of them will start out as giving symptoms of lung disease rather than liver disease. Rupture of the abscess through the diaphragm, as can easily be understood, will originate a cough and indicate something in the nature of a suppurative process in the pleura or at the base of the lung.

It has been my fortune to see one case of abscess of the liver that was discharged through the bronchial tubes, and recovery followed in a most thoroughly desperate case in which no one could hardly have expected any thing but a fatal issue. I also remember a case that was discharged by the bowel, in a little boy, in which several aspirations had been made without success, and operation was abandoned because aspiration did not reveal the presence of pus, but a day or two afterward the pus was discharged by the colon, and the boy made a prompt recovery.

Dr. H. H. Grant: The idea I had in mind was that if the diagnosis of abscess of the liver could be made out, the treatment should be surgical, on lines that we have in the last ten or twelve years learned to safely employ, and while I expect if there be a septic abscess of the liver, whether single or multiple, it is less likely to get well than the other form, such cases are certainly more likely to get well if operated upon in a satisfactory manner than if left alone. Consequently the plea I intended to make before this Society was early diagnosis and early operative interference.

Only two weeks ago a distinguished surgeon of Cincinnati told me that in an operation for impacted gall-stones, where adhesions had made it inaccessible through the ordinary incision, he separated the liver down to the duct and removed the stones through this incision. If this can be safely done, then an abscess of the liver may be safely opened after we have shut off the peritoneum or pleural cavity, whether the abscess be septic or whether it be of that form caused by the ameba coli, either of which will eventually dissect its way out through the intestine or bronchial tubes, if not by a more dangerous route, with almost invariably a fatal result.

I wished to call the attention of the Society to the fact that these abscesses can be, in the great majority of cases, detected by careful exploration of the aspirator needle, and after being detected they can be attacked by proceeding in such a manner as to shut off the cavity which would likely be infected by the discharge, and then by carefully dissecting through the liver structures the abscess is reached and evacuated.

I reported three operations. I reported one of these cases as recovering, and it is a curious comment upon the discussion here to-night that this one case was undoubtedly an infection resulting from an appendicitis, and developed within eighteen days from a time of apparent

health in a child nine years of age. The other two cases were of such a serious nature from the infection they had that neither of them could have hoped to recover under any kind of treatment. One was probably a single abscess, which was a favorable feature, but the patient was markedly exhausted and died, not from the effect of the operation or infection of the pleural cavity, but from extension of the process in an extremely large abscess. If an abscess of the liver is detected early it can be easily evacuated.

The other case was one of multiple abscess, and if any of you have ever seen a post-mortem examination of multiple abscess of the liver, you certainly realize that there may be forty or fifty foci, and of course such a condition would be practically hopeless.

How are we to determine whether in a given case there is a simple abscess with one cavity, whether there are two or three, or whether we may not successfully operate upon the other cavities after we have evacuated the first one? If we hold our hands in fear when a case presents, believing that it is one in which operative procedures should not be instituted, we will many times let a patient die that could have been relieved. Much valuable time is often lost in waiting, when introduction of the inspirator needle would disclose the condition present, and early operation would give the patient a better chance of recovery.

In my experience the outlet in the majority of cases has been upward. As stated in my paper, fully sixty per cent of cases of abscess of the liver are most satisfactorily attacked through the pleura. In some instances the peritoneal layer of the pleura can be pushed off with the fingers while the incision is made through the diaphragm and the liver drawn up in this direction. When this can not be done, the pleura should be incised in such a way as to enable the surgeon to stitch it firmly, so as to shut off the lung until adhesion can take place; and it is better in these cases to delay the operation until union has taken place, where the incision has been made through the diaphragm; but if the case is urgent it is safe enough, especially if the pleura can be pushed away, to complete the operation at once.

My belief is that abscess of the liver is an unfavorable condition under any circumstances, but infinitely more unfavorable from being let alone than from being operated upon, and that it is doubly unfavorable where the diagnosis is made so late as to allow the patient to become exhausted or profoundly septic. One object of my paper was to call attention of the Society to the fact that many of these abscesses

are overlooked; that if we will look for them, with the early use of the aspirating needle, we will oftentimes save a patient which under ordinary circumstances would have been lost.

Pathological Specimens, etc. Dr. Turner Anderson: This specimen, an ordinary jackstone, was swallowed by a little boy, five years of age, on Tuesday morning at 10 o'clock, and it was passed per rectum on the following Sunday morning at 9 o'clock. When told that the child had swallowed this specimen I advised that he be permitted to become constipated; that no purgative medicine should be allowed; that they should feed it only upon such articles as would make constipation. I simply present the specimen as one of considerable interest. The mother was instructed to give meat, bread, potatoes, etc. I simply wanted to insure constipation for several days, believing this would be the better plan. On Sunday morning following the Tuesday on which the child had swallowed the specimen it was recovered from a hard fecal mass. It was so firmly imprisoned in the fecal matter that had the mother not been very careful it might have been overlooked.

Discussion. Dr. A. M. Vance: A foreign body is often swallowed by a child, and the family send for a surgeon at once and want the foreign body removed. My practice has always been what Dr. Anderson has stated, to feed the child on crackers and bread and let it alone. The family always want to know when the foreign body is going to pass, a question which can never be answered. If you tell them it will pass in a few days, you will oftentimes be mistaken. Recently I had a case with Dr. Mills in which a child swallowed an open safety pin. I told the family that I thought it would pass in a week, but it did not pass for forty-five days. It is not uncommon for needles and pins to remain in the body for three or four weeks and then pass per rectum.

Dr. F. C. Wilson: Not many years ago I reported a case where death was caused by a copper cent. The question the family always want answered is whether the foreign body will pass. I have never seen any trouble from such an accident where the foreign body was small. A gall-stone I showed at a meeting of this Society four or five years ago shows what large bodies will pass the ileo-cecal valve. This gall-stone resembled an Irish potato, and was of considerable size, but slipped through the ileo-cecal valve and passed by the rectum.

Dr. J. M. Ray: I had a case recently something in line with the one reported by Dr. Anderson: A gentleman came to me from Morganfield, Ky., who the day before while sitting in a dentist's chair, the dentist working on his teeth, suddenly coughed and knocked the dentist's hand, and the drill with which he was drilling a tooth came out of the handle and dropped into the man's throat. At first it was crosswise in the pharynx, but in manipulating trying to get it out it was gotten straight and passed on through the esophagus into the stomach. The instrument was $1\frac{5}{8}$ inches in length. Of course it was impossible when I saw the man to do any thing, and I told him if he wanted to know exactly where the drill was, the best thing to do was to have an X-ray photograph taken. He went home and promised to let me know when the instrument passed, or if it did not pass, he would come back to see me. I have not heard from the patient since.

I remember a child that I intubated for diphtheria. A few hours afterward I went back and found the child cyanotic. I inserted my finger into the throat to see if the tube was all right, and found there was no tube in the larynx. I immediately introduced another tube. In three days the child passed per rectum the tube which had been swallowed, and finally made a good recovery.

LOUIS FRANK, M. D., *Secretary.*

Reviews and Bibliography.

The Pathology and Treatment of Sexual Impotence. By VICTOR G. VECKI, M. D.
From the author's second German edition, revised and rewritten. 291 pp.
Price, \$2.00. Philadelphia: W. B. Saunders. 1899.

Perhaps there is no subject more difficult to write upon than that of sexual impotence, whether rightly or wrongly, but most probably largely through hypocrisy; there is a hypocritical sentiment widely prevalent against treating sexual subjects in the easy, impartial manner that other physiological questions are treated.

Men who write of them have need to assume somewhat of an air of defiance, as if defending something that was wrong. This spirit is shown to a considerable degree in the present treatise, and it mars the work.

The author goes over much of the ground gone over by Kraft-Ebing, and while not manifesting the attention to particulars and details exhibited in that work, he is also lacking in the vivid interest that characterizes that author. Especially is this to be found in the treatment of perverted sexuality. However, the book does not seem to be taken up with the

insane element in these manifestations that so much impress Kraft-Ebing and others.

The work must prove of interest and profit to such as have hitherto made no especial study of the subject. At the same time we know of no department of medicine that affords opportunity equal to the one this book occupies for some capable author to distinguish himself and confer a great and lasting blessing on humanity.

D. T. S.

An Essay on the Nature and the Consequences of Anomalies of Refraction. By F. C. DONDERS, M. D., late Professor of Physiology and Ophthalmology in the University of Utrecht. (Translated under the Supervision of the Kirschbaum School of Languages and Bureau of Translation of Philadelphia.) Revised and edited by CHARLES A. OLIVER, A. M., M. D. (Univ. Pa.); one of the Attending Surgeons to the Will's Eye Hospital, etc. With Portrait and Other Illustrations. 81 pp. Price, \$1.25. Philadelphia: P. Blakiston's Son & Co. 1899.

This is a translation of a brochure by Prof. F. C. Donders, published in Holland more than thirty years ago. After the rule of geniuses, the author was far in advance of his time, and the expressed aim of the editor has been to show how nearly the world has returned to his views, in spite of innumerable controversies.

Such men do not have to learn, they have revelations; at all events, it is given them to follow a chain of logic as the bloodhound follows a trail, and they lay out work for generations coming after them.

D. T. S.

Electro-Hemostatics in Surgery. By ALEXANDER J. C. SKEENE, M. D., LL. D., Professor of Gynecology in Long Island Hospital College, Brooklyn, etc. 173 pp. New York: D. Appleton & Co. 1899.

The author has had this work published as a supplement to the third edition of his book on Diseases of Women, in which the subject of electro-hemostasis was referred to but not discussed with sufficient fullness. The author lays the grounds of his task of inculcating the importance of the method he advocates by giving out some accidents of the trade, that it may well be believed are different from those many gynecologists use where persuading patients to submit to operation. These relate to the unsatisfactory results that follow operations in the abdomen with the ligature, especially in the way of neuralgias, other pains, and various degrees of uneasiness, not to mention fistulas and abscesses. The catgut ligature, even when sterilized, he considers at times uncertain, and, being animal tissue, about the worst thing that can be left in a wound which is not completely disinfected—a thing not always easy to do where there has been suppurative action.

The silk he claims, from considerable personal observation, is not absorbed but encysted, often to escape and make its way out by ulceration, or to remain as a source of permanent annoyance. With these convictions the author has turned to the principle of Tait, whom he regards as yet without a peer as an operator, and whose success he thinks largely due to

his habitual use of the clamp and cautery. But instead of the hot iron used by Tait, Dr. Skeene has perfected cautery apparatus to be operated by the use of electricity, and this work is devoted largely to drawings of these instruments, and drawings representing the method of employing them, together with a statement of results in a large number of cases.

The showing made by the distinguished surgeon is indeed very satisfactory, and the beauty of it is that he is so well and favorably known that every one is satisfied he is drawing no fancy picture. D. T. S.

Anemia and Some of the Diseases of the Blood-Forming Organs and Ductless Glands. By BYROM BRAMWELL, M. D., F. R. C. P. (Edin.), F. R. S. (Ed.), Physician to the Royal Infirmary, Edinburgh; Lecturer on the Principles and Practice of Medicine and on Clinical Medicine in the School of the Royal College, Edinburgh, etc. 450 pp. Price, 12s. 6d. Edinburgh: Oliver & Boyd. London: Simpkin, Marshall & Co. (Limited). 1899.

This book, which is essentially based upon the distinguished author's personal experience, represents a very great amount of clinical observation and persevering work.

The diseases of the blood-forming organs and ductless glands which the author proposes more particularly to consider in this work are: Chlorosis, pernicious anemia, leucocythemia, Hodgkin's disease, Addison's disease, myxedema, and sporadic cretinism. The book is practically supplementary to the author's Clinical Atlas, the monumental classical work given out a few years ago.

That the several subjects are treated in a spirit of the most painstaking study, severe logic, and keenest acumen need not be said to those who have kept pace with this eminent laborer in medical fields.

The author's prescribed treatment for chlorosis is interesting from the widespread disposition in this country to elevate the efficacy of organic at the expense of inorganic preparations of iron; the preference being given by the author as well as by Stockman and Brunton to the inorganic, by the author preferably in the form of Bland's pills. In pernicious anemia he finds arsenic much more efficacious than iron, if indeed any thing could be called useful in so hopeless a disease.

The author points out the impossibility of distinguishing certainly and absolutely between Hodgkin's disease and certain scrofulous or tubercular affections of the glands, and also indicates certain forms of the disease that may recover, views somewhat consoling to those who, like the reviewer, have had the experience of being thrown down in the diagnosis and prognosis of such cases. One especially is remembered in which the classical symptoms were present: abdominal gland enlargement, pyrexia, and all the others, with duration for years, and which yet suppurated and discharged, and is apparently recovered.

It is in myxedema that the author's studies give the largest hope in the way of treatment, which is by means of thyroid extract. This he regards as an almost certain specific in cases in earlier life, and where no degenera-

tion of the vessels has taken place, and as helpful even in those in which it has occurred. Perhaps the reviewer is ultra skeptical in regard to the success the author has had in the use of thyroid extract in other fields, but so many eminent men have had to revise their conclusions, or have them positively set aside by others, that the most thorough demonstration is reasonably required in all cases. Dr. Bramwell may possibly be over-sanguine, severely painstaking, and severely critical, as he undoubtedly is.

This work will add another stone to the monument the author is building to his own renown and to that of medical science in classic old Edinburgh.

D. T. S.

A System of Medicine. By Many Writers. Edited by THOMAS CLIFFORD ALLBUTT, M. A., M. D., LL. D., F. R. C. P., F. R. S., F. L. S., F. S. A., Regius Professor of Physic in the University of Cambridge; Fellow of Gonville and Caius College; Honorable Fellow, Royal College of Physicians of Ireland. Volume VI. 944 pp. Price, \$5.00. New York: The Macmillan Company. 1899.

The list of contributors to this volume embraces the names of Drs. Thomas Clifford Allbutt, Thomas Barlow, Fred E. Batten, Charles E. Beevor, R. Brudenell Carter, H. H. Clutton, R. A. Fleming, Sir W. T. Gairdner, G. A. Gibson, Henry Head, John Hopkins, Victor A. H. Horsley, W. Bevan Lewis, Frederick Walker Mott, George Newton Pitt, Sir R. Douglas Powell, Frederick T. Roberts, Humphrey Davy Rolleston, J. S. Risien Russel, Seymour John Sharkey, C. S. Sherington, W. Aldren Turner, Horace Turney, William H. Welch, and W. Hale White, names that in any book would lend and not borrow distinction. This volume embraces a continuation of diseases of the circulatory system, diseases of muscles, and diseases of the nervous system.

In the article by Dr. Powell on angina pectoris and in that by Dr. Welch on thrombosis a more complete account is given than we have seen elsewhere of the pain and weakness due to the arrested blood supply of a part, in this way connecting these diseases and probably others in the production of pain. Embolism may produce pain in the same way as does also the contraction of arterioles in Raynaud's disease and in the kindred form of erythromelalgia.

There is no subject touched upon in the volume that does not receive the most discriminating attention. It well maintains the standard of the system as beyond doubt the most thoroughly elevated in style and up to date in character now to be had in the English language, if indeed it has anywhere an equal.

D. T. S.

The Philosophy of Memory and Other Essays. Consisting of articles on the Philosophy of Emphasis, The Functions of the Fluid Wedge, The Birth of a Planet, and The Laws of Riverflow. By D. T. SMITH, M. D., Lecturer on Medical Jurisprudence in the University of Louisville. 203 pp. Price, \$1.25, net. Press of John P. Morton & Co. 1899.

This work deals with problems that have held a leading place in the attention of a large number of the foremost philosophers and scientists of

the last three centuries, and problems that for the most part have up to the present remained confessedly unsolved.

The leading essay, "The Philosophy of Memory," is an effort to develop the wave or vibration theory of mind. It treats of the nature of the common force and its relation to the vital force; the nature of the soul, its possible origin, and its relation to vital manifestations; the nature of mind, and conscious as well as subconscious mental activities; of memory as the result of persistent vibrations in the brain cells; of the resemblance between memory and external undulations, and of the process by which thoughts, ideas, and emotions are evolved, guided, and preserved; of mind-reading or telepathy; of grouping of vibrations as the source of the law of beauty and truth in art and conduct; and finally of the religious feeling as related to ether undulations.

The second essay, "The Philosophy of Emphasis," is a supplementary essay closely related to "The Philosophy of Memory," and applies the vibratory theory to the laws of vocal expression.

"The Functions of the Fluid Wedge; or, the Philosophy of Sphere-forming," treats of a principle in physics discovered by the author, and relates to the method by which fluids seek equilibrium. It assumes liquids and fluids to consist of unlimited numbers of prisms or wedges moving upon each other, substantially without friction, and acting as the exact counterpart of a like number of solid wedges moving upon each other without friction. Under this principle is explained how a flexible tube, as a section of garden hose, straightens under the pressure of a contained liquid; why the soap bubble or the toy balloon becomes a sphere; why the tea in the spout has the same level as that in the teapot, and how bodies of water can rock as in so-called seches.

The theory also explains the movements resulting in earthquakes and volcanoes, and does away with the doctrine of the hydrostatic paradox.

"The Birth of a Planet" is a criticism of the nebular hypothesis of La Place, which seeks to show that planets could not have originated as hitherto taught by astronomers, but that they must have been cast off at a tangent by the parent bodies, and must revolve in a larger circle than they moved in while yet a part of the parent body. The possible collision of cometary bodies with the nebulous rims of revolving globes is suggested as the source of origin of their satellites.

The fifth and last essay has a peculiar interest as offering a most satisfactory solution of the behavior of streams flowing in channels, a problem whose solution has been sought by a large number of the most eminent minds in modern times; such renowned names as Galileo, Newton, Pascal, Thompson, and Tyndall having led in its investigation. This essay treats first of the formation of the seas as inaugurating drainage to be developed under the principles it presents.

Next follows a demonstration of the formation of a stream of water, wherein it is shown that by the laws governing friction and motion every

stream throughout its length is necessarily divided into two parallel halves, revolving spirally toward each other at the surfaces.

Without this law of the "double-spiral," as the author names it, it is conclusively shown that there could be no channel formation, but that the water would simply creep over the earth to the sea, presenting but a vast expanse of marsh, or streamless wastes in which the maintenance of human life would be impossible. Under this principle the author explains the shape of channels and their limit as to depth and width, the fact that the greatest speed of streams is at some distance beneath the free surface, the fact that streams are highest at the middle, that delta rivers have many mouths, and that the banks are highest at the margins of such streams. The principle of the double-spiral is shown to apply to glaciers and atmospheric movements as well as to liquids. The essay closes with a suggestion of the utility of the principle in dealing with control of the Mississippi and other large rivers.

The book is full of interesting suggestions, and, though not large, probably contains the report of a greater number of discoveries of important scientific principles than any one volume in existence. R. B. G.

Abstracts and Selections.

CEREBELLAR ABSCESS IN CHILDREN.—At a meeting of the Philadelphia Pediatric Society, June 14, 1899, Dr. L. J. Hammond read a paper entitled, "Remarks on the Diagnosis of Cerebellar Abscess in Children," with a record of five cases.

He said that pyemia of the encephalon occurs in children usually as the result of suppurative inflammation of the cavities accessory to the brain. The period, therefore, when it is most to be expected is from the beginning of dentition through the time of special liability to the exanthematous diseases. Traumatism is also a most frequent cause; many times when apparently trifling it may lead to deep-seated disease. The same pathologic conditions cause usually cerebellar abscess in children, while in adults the disease is generally in the cerebrum or extra-dural. This condition is probably explained by the fact that the outer table of the bone in children is less dense, and this permits of an early rupture and spontaneous evacuation of the pus from whatever infective source it may arise. There seems at least to be no other explanation for the occurrence of abscess in this portion of the encephalon; in the five cases that had come under Dr. Hammond's observation there had been during the same period three cases of cerebral abscess in adults from the same infective source. It is obvious, therefore, from the frequency of its occurrence and its great fatality that a definite symptomatology should be recognized in order that early operative intervention may be instituted. The symptoms that have been

so universally present are: discrepancy between the temperature and pulse, the former being often subnormal, while the latter ranges 120 to 160; flexion of the extremities; dilatation of the pupils; uncontrollable restlessness, with a half unconscious condition; peculiar indisposition on the part of the patient to obey requests made; sugar in the urine; slow respirations; swinging of arms and inclining head toward one side, and absence of paralysis. The observation of these symptoms made it possible to locate abscess in the cerebellum in four of the five cases that have come under Dr. Hammond's observation.—*Annals of Gynecology and Pediatrics*.

HOSPITAL FACILITIES NEAR MANILA.—A report on the hot springs at Los Banos, five hours' ride north of Manila, calls attention to the excellence of the buildings, at that place, abandoned by the Spaniards. The baths are in good repair, lacking only the few pipes and faucets removed by the insurgents. The surrounding country rises rapidly from the shores of Lake Laguna de Bay to a height of 400 to 700 feet. The drainage is good, and the place has the reputation of being always cool. A hot-water spring is conducted by a natural conduit to near the former Spanish hospital, whence it is conducted to the hospital itself. The temperature of the water is so high that it furnishes steam vapor for the bath-house, and where it empties into the lake the natives use it to scald their chickens. The volume is about 10,000 gallons per diem. There are here four classes of water from different springs, all medicated—one being sulphurous. An excellent water-supply of clear, cold water is available for use in the hospital, which is solidly constructed, having a galvanized iron roof and affording ample accommodations for four hundred beds.

A communication from the commanding officer of the Convalescent Hospital, Corrigedor Island, at the mouth of Manila Bay, recommends that the large tent hospital, now on that island, be converted into a frame hospital before the beginning of the rainy season. Corrigedor is much cooler and more salubrious than Manila, and the Spaniards had lately recommended that a "camp of acclimatization," for troops arriving from Spain, be established there. For the four months since the opening of the hospital the average temperature has been 80° F., A. M. and P. M. observations being taken. The maximum temperature was 82° F. and the minimum 78° F., the constant breeze so tempering the heat as to render it always comfortable. Excellent building sites of almost unlimited extent are available, having an altitude of several hundred feet, a broad prospect, and plenty of large trees to furnish shade and protection from the winds. An excellent macadamized road leads to this hospital site. The surface drainage is excellent. All refuse and excreta are collected twice daily and thrown into the sea. A large stream furnishes an adequate supply of excellent water, which suffices also for the laundry, baths, and irrigation of the street and grounds. Corrigedor Island possesses the great advantage of being entirely Government property.—*Boston Medical and Surgical Journal*.

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THE RANK OF THE SURGEON GENERAL OF THE U. S. ARMY.

At the regular annual meeting of the Medical Association of Georgia, in April, 1899, a resolution looking to the raising of the rank of the Surgeon General of the Army from that of Brigadier to that of Major General was framed, presented, and unanimously adopted.

The argument favoring the advancement turns upon the fact that such rank is "more commensurate with the profound learning, varied experience, and high order of administrative talent required in one assuming the grave responsibilities of the position, to ensure the successful discharge of the duties thereunto appertaining."

And further, that "members of our profession who are likely to be called to the Surgeon General's office must make a sacrifice in income in excess of that to be derived from the position, though it be raised to the rank of Major General with its pay and allowances; and for the dignity of our profession, as well as the sacrifice that must be made by each incumbent, the Association was unanimous in the opinion that the position should be made one of the most important in the army, as it is second to none in the vast and varied responsibilities it imposes."

We here present the resolution with the hope that every influence that can in any way be made to serve so worthy a purpose may be marshalled in its favor.

The present incumbent stands at the head of the profession in intellect, learning, and scientific eminence, and to ask for him higher rank, and better pay, is but to ask what in justice is due to such a man :

WHEREAS, The position of the Surgeon General of the United States Army involves great and grave responsibility, the direction of vast interest, the highest order of professional skill and learning, and executive ability ; and,

WHEREAS, The number of officers and soldiers under the direction of the Surgeon General in an army organized as is the army of the United States is greater than the command of a division commander ; be it

Resolved, By the Medical Association of Georgia, that it is the sense of this body that the Surgeon General of the Army should have the rank, pay, and allowances of a Major General.

Resolved, That the Medical Association of Georgia requests all the Medical Societies of the United States to join in this appeal.

Resolved, By the Medical Association of Georgia, that copies of these resolutions be transmitted to the President' of the United States, the Honorable Secretary of War, and our Senators and Representatives in Congress, with the request that all co-operate in attaining the end sought ; and further, that copies be also sent to the American Medical Association, and all other medical societies in the United States, with the request that they join in this memorial to Congress, and urge prompt action upon this subject by our national legislative authorities.

Notes and Queries.

At the regular annual meeting of the Louisville Medico-Chirurgical Society held at Seelbach's Hotel, Friday evening, June 2, 1899, the following officers were elected for the ensuing year: Dr. William Cheatham, President ; Dr. Louis Frank, Vice-President, and Dr. Thomas L. Butler, Secretary.

SANTIAGO SINCE THE SURRENDER.—The last number of Scribner's Magazine contains an article by Gen. Leonard Wood, Military Governor of Santiago, with the above title, which gives a most impressive, instructive, and at the same time temperate and modest account of the condition of Santiago at the time of the surrender, of the administrative and sanitary work in that province since General Wood's appointment, and of the present civil and hygienic condition of affairs—a condition which represents not merely an amelioration but a revolution, and a revolution which has abolished civil and sanitary crimes not of a few months' or a few years' but of several centuries' duration.

The results which have been accomplished are admirable and astonishing; the account is conspicuous among magazine articles by the very limited pictorial presentation of the writer and chief actor and the scarcity of the pronoun of the first person. Those who wish to know more of the doer, as well as of the deeds, are referred to an article in McClure for March and one in the Buffalo Medical Journal for April.

General Wood represents at its best the type of man of which our country is going to need many in the administration of the islands for which she has recently made herself responsible, the type of man represented by the Lawrences in India, the type of man which this country does well to honor and will do well to hold up to its youth for imitation. It has been his mission to save life not to destroy it, to prevent disease not to encourage it, to administer even-handed justice not to enrich, aggrandize, or avenge himself. And what he has done he has done at the peril of his own life and his own health—not in the heat of battle or during the excitement of a brief period, but during the heat of prostrating fevers and over long weeks and months of self-sustainment.—*Boston Medical and Surgical Journal*.

THE PSYCHIC STUDY CLUB.—The new Psychic Study Club held its second meeting on May 18th. In opening it, the president, Henry Frank, laid stress on the absolute impartiality and freedom from prejudice with which it was proposed by the founders of the club that the examination of psychic phenomena should be approached. Prof. John D. Quackenbos, of Columbia University, spoke of recent developments in the study of hypnotism, and detailed a number of experiments made by himself. W. E. Robinson, who was formerly an associate of Hermann, the magician, made an *expose* of "spirit" slate writing, and showed by actual demonstration how easily the results attained by professional mediums could be produced by ordinary sleight of hand.—*Ibid*.

ACIDITY OF THE MOUTH DURING SLEEP.—The dentists tell us that an acid condition of the fluids of the mouth plays an important part in the etiology of dental caries; also that the causes of that affection are particularly active during the hours of sleep, when the saliva stagnates, so to speak, instead of being subjected to the agitation and renewal incident to the chewing and other movements that to some extent are almost continuous except during sleep. However carefully we may cleanse the teeth and rinse them with antiseptic solutions on going to bed, therefore, we are guarding but temporarily against decay; it gains on us while we are asleep. Possibly those who suffer with insomnia may snatch a crumb of comfort from this reflection, but we fear there is in it no consolation for the mouth-breathers, for the desiccation of the mouth which takes place in them during sleep, while enough to give rise to considerable discomfort on their waking, is quite insufficient to hamper pathogenic bacteria in their work of destruction.—*New York Medical Journal*.

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NO. I.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE UTILITY OF THE BLOOD-CLOT IN THE TREATMENT OF WOUNDS.*

BY R. C. M'CHORD, M. D.

The utility of the blood-clot in the treatment of lacerated wounds has always been recognized by surgeons, and a blood dressing, before the advent of antiseptic surgery, was considered the best; and the surgeon learned by experience that wounds under this dressing gave less trouble, and if left undisturbed for a sufficient length of time frequently healed without suppuration. This was one of the first things to open the eyes of surgeons to the fact, and to demonstrate to them, that suppuration was not necessary to the healing process. On the advent of antiseptic surgery, chemical sterilization, where extensive injuries or operative wounds necessitated a great amount of oozing, was considered an ideal dressing. For this purpose absorbent dressings were used which had been rendered antiseptic or aseptic by saturation with a chemical germicide, or sterilization, thus preventing decomposition of the absorbed serum or blood, hastening exsiccation and insuring the protective action of the dressing; but when extensive loss of substance, consequent upon injury or operative wounds, precluded approximation of the walls of the wound and rendered healing by first intention impossible, suppuration with its evil consequences was almost inevitable until Schede demonstrated a modification of the above dressing, favoring the organization of the moist blood-clot, which rendered it possible to fill up the defects, and by preserving it

* Read before the Kentucky State Medical Society at Louisville, Ky., May 18, 1899.

from exsiccation and putrefaction the wound heals without suppuration, granulations consuming the blood-clot, and by the time the clot disappears cicatrization is completed and the integrity of the part maintained. To successfully apply this method it is necessary that we have an antiseptic or aseptic wound and a well-formed blood-clot, immediately over which, and projecting slightly beyond its edge, is laid a suitably trimmed piece of fine rubber tissue, previously well soaked in an antiseptic fluid. This is covered with a layer of iodoform, antiseptic or sterile dry gauze, and the whole is well enveloped in an ample covering of dry sublimate or sterile gauze. The film of rubber tissue will preserve the underlying clot in a moist condition, and the outer dressings will absorb and render innocuous the surplus of blood and serum. Possibly from force of habit I prefer for the first iodoform, and for the more ample covering, dry sublimate gauze. This dressing may be allowed to remain on until cicatrization is completed, or, if the outer dressing should have become hard and stiff from the dried blood or serum, it, or even the whole, may be removed and replaced under strict antiseptic precautions; but it is best to leave the wound undisturbed as far as possible.

The utility of this method of the moist blood-clot dressing has been more prominently brought to the attention of the profession in its application to the treatment of destructive wounds in bones, by which their integral parts are preserved independent of the presence or absence of a sufficient covering of deep soft parts or skin. The blood-clot being made to fill up the defective space made by operation or injury in the bone, the tissue takes the place of the skin.

That this principle in the treatment of wounds is susceptible of larger application than has been heretofore in vogue I have been convinced for some time, and, acting upon this belief, I have for several years applied it successfully to the treatment of lacerated wounds of the soft parts, with destructive loss of tissue, on various parts of the body; but it is more especially that I desire to call your attention in this short paper to its application in the treatment of wounds in the ends of the fingers, where the soft parts have been severed or pulled loose from the bone, leaving it exposed without any soft tissue as a cover. We are all aware that such wounds of the phalanges were formerly doomed to amputation; but in these wounds, when the exposed end of the bone was not over one-fourth inch, I have succeeded, by milking the blood from the finger, in forming a clot over

the bone, and by the use of this moist blood-clot dressing obtained excellent results and the preservation of the finger in its entirety.

We all know what the loss of the tip end of an index finger or thumb means. These results have been gratifying to me, and it is astonishing with what rapidity the blood-clot is transformed into new living tissue, a week or ten days being sufficient to effect the transformation. To obtain a properly shaped clot, it has been my habit, as the blood flows, to blow iodoform upon it from a powder blower, which favors the formation of the clot and stops the flow of blood at such points as is necessary, the minute film of iodoform helping to preserve the clot while the rubber tissue is being applied.

Should the exposed bone be over one-fourth inch, I do not believe it possible to form a perfect clot over it. In these cases it has been my custom, instead of dissecting back the soft parts sufficiently to get a covering and then cutting off the bone, I have, in order to save as much of the finger as possible, cut the bone back to a sufficient point, and then formed the blood-clot over it as described above. In the soft parts, where the tissues have been scooped out by machinery, the surgeon's knife, or otherwise, it is a very simple process to fill the defect with a blood-clot up even with the skin, and by the use of the moist blood-clot dressing have it to heal in one half the time and with much less trouble than with ordinary granulations.

LEBANON, KY.

THE PREVALENCE OF AMETROPIA AND HETEROPHORIA, WITH REMARKS ON EYE-STRAIN.*

BY A. G. BLINCOE, A. M., M. D.

When I first heard of eye-strain as a cause of nervous diseases I supposed that cases of it were rare and only found occasionally. I thought perhaps a number of cases might have to be examined before one would be found with a refractive or muscle error. But after I had been doing refractive work for some time, and had examined the eyes of quite a number of suspected persons, I was astonished to find every one with either refractive or muscle error, and sometimes both. These cases, however, were those complaining of some of the symptoms indicating eye-strain. I then became curious to know about how many people have refractive or muscle errors, and looked for some statistics on the subject to see if I could get any information that would enable me to make an approximate estimate of the per cent of mankind that

* Read at the May meeting of the Kentucky State Medical Society, 1899.

are ametropic or heterophoric. Being a general practitioner, and consequently not very extensively supplied with ophthalmic literature, I was unable to get a very large mass of statistics, but found that four different observers had in a total of over 4,000 examinations under atropia, especially in school children, reported less than five per cent of emmetropic eyes. These examinations were made years ago when the smaller refractive errors, the correction of which is now giving such satisfactory results, were probably not considered, and no muscle tests at all were made; so that if heterophoria had been taken into consideration, it is more than likely that this small per cent of perfect eyes would have been still further reduced.

Since seeing these statistics, I have in talking to some of my patients sometimes remarked that probably nine out of ten or possibly nineteen out of every twenty of us have defective eyes. I did not then suppose, however, the condition to be so very general as it would seem to be from the following:

In a very interesting paper read at the last meeting of the American Medical Association by no less an authority than Dr. Geo. M. Gould, of Philadelphia, entitled "A Pair of Mathematically Perfect Eyes," he says:

"Absolute emmetropia, a mathematically perfect pair of eyes, does not, I believe, exist. A perfect leaf has not been found, nor absolute symmetry in any organic thing. The report of perfect emmetropia is a confession of negligence or unskillfulness. I have made such reports myself, and can therefore speak dogmatically. If such a diagnosis has been made without a mydriatic, the negligence deserves a much harsher naming."

In the discussion of another paper at the same meeting, Dr. B. Alex. Randall, also of Philadelphia, a man of very large experience, says:

"When I hear of hosts of cases that are emmetropic, I am skeptical as to all the rest; I must say, as a result of my investigations, that true emmetropia is almost an unknown quantity."

I have seen no statistics of muscle errors except the one hundred medical students examined by Dr. Tiffany, in which he found fifty-seven per cent of heterophoria. It is not contended, of course, that all cases of ametropia or heterophoria cause serious nervous or other troubles. I think there are many persons who go through life with refractive or muscle errors without suffering serious inconvenience from them. I am prepared to believe this from the fact that after examining

many elderly people for presbyopia I have often found ametropia or heterophoria which had seemingly never caused any of the troubles usually arising from these conditions; yet these very people might have enjoyed more vigorous health if they had had their eyes properly attended to in early life.

On the other hand, I have seen many younger persons suffering from asthenopia, etc., who dated their troubles from a spell of sickness. It seems, therefore, that in strong and healthy persons eye-strain may show no marked symptoms; but if these persons become weakened by disease or otherwise the symptoms may then make their appearance.

In regard to this matter Hotz says: "Many eyes can endure a great amount of strain with impunity, while others are so constituted that their powers of endurance are quickly exhausted. One person may need glasses for the correction of a small amount of ametropia, while in another the correction of a much higher degree is unnecessary, and glasses would be superfluous. We can not draw the line at a certain amount of ametropia, but should correct it, no matter how slight in degree, whenever it leads to disturbances of which eye-strain constitutes the most frequent cause."

That a large number of persons do suffer from this cause I have from my own experience in the last seven years not the slightest doubt. I have myself treated about two hundred cases of headache and other nervous troubles by correcting refractive and muscle errors, with the result of about forty per cent cured and fifty per cent benefited, making a total of ninety per cent cured or benefited.

Many others of much larger experience have reported equally as good or better results from the same treatment.

In an editorial in a leading eye journal of September, 1898, the writer says: "It is the conviction of many scientific minded and careful men that eye-strain has a great deal to do with functional gastric troubles, with anemia, with the origin of glaucoma, cataract, etc.

"We directly relieve ten times the suffering every day by refraction that we do by operations, and we prevent a hundred times that amount."

Now, if these views are not overdrawn we would hardly exceed our duty to our patients if we should advise every one suffering, not only with any of the functional nervous diseases but with any chronic gastric or intestinal derangement not accounted for by other causes, to have his eyes examined by a competent refractionist.

I believe that there are many persons who suffer from eye-strain, unconsciously perhaps, who are in a debilitated condition on account of it, and therefore more susceptible to disease germs, and consequently more liable to take certain diseases and less able to cope with them when attacked.

I am further convinced that many persons suffering from consumption and other chronic debilitating diseases might be benefited, to some extent at least, by having their eye-strain, if any, corrected, thereby relieving them of one factor—a loss of nerve force due to the eye-strain—in causing their debility.

In a paper read at the last meeting of this Society I reported several cases that tend to bear me out in this latter opinion. Several of them who had made no complaint whatever of any eye trouble were found ametropic or heterophoric, and since wearing their correction a year or more have improved materially in general health and strength, and some of them have gained from fifteen to thirty pounds in weight. Several persons to whom I have related the case of the young man who had been going on crutches for two years and laid them aside within a year after putting on glasses for headache, have laughed at the idea of a pair of spectacles enabling a cripple to go without his crutches; but when we bear in mind the fact that it is the nerve force which runs the human system, and that the glasses simply stop a leakage of this force caused by the eye-strain, and allow the system to build up, it does not seem so absurd after all.

One of the cases of epilepsy that I reported last year has had no attack now for over fifteen months. He had such strong external muscles that graduated tenotomies seemed in his case to do but little good. I finally, at the suggestion of Dr. Valk, of New York, did complete tenotomies of both external recti, and afterwards shortened both internal muscles before his muscle balance became normal.

Another case of chronic epilepsy having spells about once a week, for which I simply fitted glasses in December last, has had but two attacks since. This patient has also been entirely relieved of his headache and dyspepsia since he began wearing his glasses.

BARDSTOWN, KY.

ONE HUNDRED AND THIRTY-TWO GALL-STONES REMOVED WITHOUT OPERATION.*

BY EDWARD SPEIDEL, M. D.

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Cholelithiasis, the condition leading to the formation of gall-stones, is beginning to be recognized as a very frequent disorder in the experience of medical men, and the fact that in many cases the diagnosis is only made post-mortem, by finding the gall-stones in the gall-bladder, proves that perhaps many of the obscure abdominal symptoms presenting themselves in our patients may be due to that condition. The treatment at the present time is almost entirely surgical, and the results of such treatment are very promising; but the laity still have a great horror of operative work, and in consequence many sufferers from this condition try one physician after another and one watering-place after another with only temporary or partial relief, but still refuse the panacea offered them by a surgical operation. The following case, presenting possibly the severest form of this trouble, was relieved entirely by the method outlined in this paper, and the principle of treatment should be applicable to other cases.

On the 17th of September, 1898, the patient, a lady fifty-five years of age, consulted me with the following history:

She had been sick for the past five years with colicky pains in the abdomen, increasing in severity in the last two years, and for the three months preceding the day upon which she called at my office they occurred regularly two or three times a week. The attacks were preceded by a chill, and ended with fever and sweats. An attack often lasted for twenty-four hours; did not end suddenly, and was followed by intense jaundice and pigmentation of the conjunctivæ. The pains were felt in the right hypochondriac region, and the patient always noticed a swelling there during an attack. Carlsbad salts had been taken every morning for a year. The patient had been at French Lick Springs, and had been under other treatment without relief. She had finally been advised to submit to an operation, but absolutely refused to accept the suggestion. The patient showed a deeply jaundiced skin, deep pigmentation of the conjunctivæ, tongue heavily coated, body emaciated. Temperature 99.5°; no history of constipation, but stools clay colored. Examination of the abdomen showed a slight enlarge-

*Read at the May Meeting of the Kentucky State Medical Society, 1899.

ment of the liver and tenderness in the region of the gall-bladder. The urine was very dark, almost the color of molasses; had a sp. gr. 1032, acid reaction, and gave a marked reaction with nitric acid color test for bile. It also showed calcium oxalate crystals microscopically. A gall-stone had never been noticed in the passages, although constantly watched for. The patient presented the typical symptoms of chronic catarrhal cholangitis, and treatment was begun for that condition.

The trouble was brought on by errors of diet, resulting, it was judged, in a chronic catarrhal condition of the stomach and intestines, and affecting the common and cystic ducts by contiguity. In that condition we have a hyperemia and hyperplasia of the gastro-intestinal mucosa, the membrane being covered by a tough yellowish-white mucus with pus cells. In very severe cases the mucous membrane is even found mammillated, that is, thrown into folds. It was concluded that one or all of these conditions could be present in this case, and that accordingly a plug of mucus and possibly a fold of the mucous membrane occluded the common duct and imprisoned the contents of the gall-bladder. It was also supposed that in consequence of the retention, that the bile was in a more or less inspissated condition. The restoration of the gastro-intestinal mucosa to a fairly normal condition should result in the removal of these obstructions in an increase of the lumen of the common duct and a release of the matter imprisoned in the gall-bladder. The final result in this case probably establishes the correctness of this idea.

The patient improved gradually under treatment; the colics were less frequent and of shorter duration, and on the 25th of October the urine showed a sp. gr. of 1010, with only a trace of bile. The feces were dark colored. By the 12th of November the patient had not suffered with colic for two weeks, but was now troubled with intense itching of the skin upon retiring at night. This was diagnosed as due to a deposit of bile pigment in the tissues. On December 3d the patient had a severe attack of the colic, beginning early in the morning and lasting until 6 P. M. At that time she had an intense pain and desire to go to stool, and then passed the gall-stones that are exhibited in connection with this case. The patient collected the 132 shown in the bottle, and claims that quite a number escaped from the bowl of the water-closet before she realized what had occurred. A few small stones were passed in the succeeding days, but since the 7th of December none have been noticed; the patient has been entirely free from colics;

the pigmentation of the skin is disappearing, and her general health is improving in every respect. Upon examining the gall-stones in the bottle it will be found that two of them are very much larger than the others. It is the writer's idea that the cystic duct was occluded by the two large stones, the smaller ones being imprisoned above them in the gall-bladder. It is also concluded that in the beginning the common duct was occluded by the greenish thick mucus that was passed with the feces at times in the early treatment of the case.

Treatment was begun with a calomel purge, followed by a saline, and the patient put upon a simple but nutritious diet. She was instructed to drink three large glasses of buttermilk daily, and to increase the quantity as she became accustomed to it. The patient not relishing the other things allowed her, soon consumed a quart of buttermilk daily. The patient drank a glass of hot water at bed-time and upon arising and with each dose of medicine ordered. In addition to this, she was instructed to take a hot bath at bed-time twice a week, remaining in the hot water for fifteen minutes. Three times a week at bed-time a high rectal enema of normal saline solution, temperature 110° to 120°, was to be used.

For the attacks of colic she was given a mixture containing two and one half grains each of antipyrine and phenocoll mur. to the dose, such a dose to be taken every half hour with hot water until relieved, the hot bath and rectal injection being used at the time also. In the interval the patient was put upon ten grains of salicylate of strontium three times daily. During the last two months the medication consisted of increasing doses of tr. chionanthus virg., the prescription being varied by the addition at times of one of the tonic bitters, as nux vomica and columbo, again by the addition of arsenite of copper, and in the last month by the administration of nitro-muriatic acid with the chionanthus. During the last month, on account of the intense itching, the hot baths were used every night.

I ascribe the successful outcome in this case to the fact that the gastro-intestinal tract improved rapidly under this treatment, as shown by the appearance of the tongue. The obstructing mucus in the lumen of the common duct was being gradually removed, if it is correct to suppose that the small masses of green mucus voided with the rectal enemata at times came from that source. Furthermore, on the day upon which these stones were passed, the patient had drunk an unusually large quantity of buttermilk, which may have been a factor in

the case. She was taking the antispasmodics mentioned before, with the reflex peristalsis induced in the small intestine by the hot rectal enema. Upon examining the stones in the bottle you will find two of them much larger than the rest. It is claimed that the cystic duct was occluded by these large stones, and that after they were forced out, the smaller ones escaped with little difficulty.

As to the therapy, the strontium salicylate was given for its anti-septic, antifermentative, and especially for its cholagogue effect, it having the property of not only stimulating the hepatic cells to increased secretion, but to increase the fluidity of the bile also, thus offering a *vis a tergo* to the other means used in rendering the biliary passages patent. *Chionanthus virginica* is an officinal drug; only four lines are devoted to it in the last dispensatory. It is used extensively by the eclectics, and is indicated especially in lithemic conditions. It was given throughout in combination with one drug or another for its stimulating action upon the hepatic cells, and under its use the feces became darker in color, and bile began to disappear from the urine. Arsenite of copper and nitro-muriatic acid were given in combination with one or the other of the above drugs, and the vehicles of course changed frequently in order to keep up the interest of the patient. Every dose of the medicine was taken with a large glass of hot water, and a gradual improvement was brought about in the gastro-intestinal tract, as evidenced by the clearing up of the tongue.

The high rectal enemata were not only intended to cleanse the bowel of fecal matter, but when it is considered that the patient soon was able to retain a half gallon of normal saline solution of a temperature between 110° and 120° from bedtime until the following morning, it may readily be imagined that the moist heat produced by its presence would have a beneficial effect upon all the organs in the abdominal cavity, causing besides a reflex peristalsis that should affect the stomach duodenum and biliary passages favorably. The hot immersion baths were begun when the intense itching was added to the other symptoms, and not only afforded considerable relief for that trouble, but no doubt also had a favorable effect upon the local condition.

That the diet was an important feature of the case should be evident to every one. It was restricted within reasonable limits, and the use of buttermilk advised. The patient cared but little for the other articles of diet allowed her, and soon subsisted to a great extent

upon the buttermilk. On the day on which the stones passed she had consumed an unusually large quantity of it.

Nearly all text-books recommend morphine in sufficient doses to relieve pain in the paroxysms. It was determined to rely upon other means in this case, as the after-effects of the morphine, constipation, etc., would interfere greatly with the other treatment. The combination of antipyrine and phenocoll muriate was resorted to, and with the rectal enemata readily controlled the pain.

The mortality from cholecystotomy has been reduced to a minimum by the recent advances in abdominal surgery, but the laity has not learned as yet to view these procedures from the standpoint of the surgeon, and so the general practitioner is bound to meet with cases that refuse an operation. In such instances if it is a case of cholangitis, that is, the condition leading to the formation of gall-stones, then a cure should follow the means suggested; when gall-stones actually exist, a fair measure of success should result from this treatment.

To the surgeon the writer recommends this procedure as a post-operative treatment in surgical cases, to restore the affected parts to their normal condition, and thus prevent a recurrence of the ailment for which the operation was performed.

LOUISVILLE.

Reports of Societies.

KENTUCKY STATE MEDICAL SOCIETY.*

Discussion of Cerebro-Spinal Meningitis. Dr. Marvin, Louisville: I open the discussion with considerable embarrassment, feeling that it is a subject that I know very little about, and concerning which I can hope to tell you very little that you do not already know. I was so unfortunate as to miss hearing the first papers, so I can not traverse the ground covered by those speakers. Just a thought or two bearing on my individual experience with the trouble that I am extremely anxious never to see again, and I suppose you will shake hands with me in the hope that we may never meet a case of this trouble again. Regarding the cause of it, I have done a good deal of reading and thinking, and while the bacteriologists all seem to be a unit in ascribing to the diplococcus intra-cellularis pathogenic properties, the question that has bothered me has been this: How could this organism find

* Meeting held in Louisville May 17, 18, and 19, 1899.

entrance to the cerebral and spinal membrane? I think your experience will bear me out in this, that recently anyhow the cases of spotted fever have generally followed in the wake of influenzal troubles, and I believe that the point of entrance is very frequently through the nasal passages. Now, in the nasal secretion as well as in the buccal secretion of apparently healthy people we can quite frequently find a micrococcus almost if not quite identical with this micro-organism. That seems to be a common local habitat, and if, as some claim, this micrococcus is simply an abortive form of the pneumococcus, which commonly resides in those secretions, you can readily see in what peril a man may be if he has some depressing disease, such as the grippe, which simply lets the bars down to the entrance of the organism upon these structures.

Another point is the great difference in the severity of different cases. Why, we can only stand dumfounded, helpless, and hopeless before a case stricken down with such suddenness and severity and dying in a few hours. There is a case I know of, that occurred only a few days ago, in which the patient died within a few hours. Often death occurs so suddenly that we have no way of knowing what the disease is, except by inference. Possibly on autopsy no changes would be found sufficient to justify you in saying that it was a case of cerebro-spinal meningitis. I think in this outbreak the majority of cases have not been of that type, but of a mild grade. The reports from other cities and places would indicate that the mortality has not been nearly so high as I thought before I saw the statistics. Now, taking the average case, such as we have here and such as I have seen most frequently, one of the most puzzling points is the question of diagnosis. Remembering what I said at the outset about influenza, or grippe, I believe quite commonly these cases would be diagnosticated as grippe; headache, backache, legache, etc., are all characteristic of grippe. The first case we had in Louisville, in this outbreak, that I saw, was diagnosticated as grippe and treated as grippe for two or three days. I believe the average cases you see, if grippe were prevailing, would puzzle you. Of course in a little while the symptoms usually clear up, and the physician who has his eyes open and makes any examinations would readily make a diagnosis.

Dr. John A. Lewis, Georgetown: I will speak here the few remarks I shall make. In view of the fact that the lower portion of our State of Kentucky has passed through an epidemic of this malady, I think that our discussion of the subject is both opportune and important. I

feel that the gentlemen who have preceded me have left nothing for the gleaner, for the reaper has done his work and done it well. The gentlemen have treated the subject as well as and as learnedly as could be. And they have been in the midst of this pestilence that walketh in darkness and destroyeth by noonday. And yet, gentlemen, when we come to stand before one of these cases, we shall still be as helpless as the child in the cradle. We have reiterated and gone over the etiology and the symptoms and the diagnosis so that the recognition of the disease is plain, and there can be no doubt about it. We do not have to puncture the spinal column as a rule for the diagnosis of this disease. The vomiting, fever, headache, hyperesthesia usually make the diagnosis easy, so that we can almost always diagnosticate the case at once. I thank the gentlemen for this discussion, to which I only wish I could add something, so that when I go back home and when my people ask me, when a case of spotted fever is announced, "What can I do to prevent it?" I need not feel so helpless as I must confess to you I am at the present time. The people look to us as the guardians of their health. Now, let us pitch our tents in front of this deadly enemy, and do not let us retire until we have stormed their citadel. Do not let us stop until we can offer these patients some hope of recovery. Any disease, gentlemen, in which the mortality is from fifty to seventy-five per cent strikes fear to the heart of the people. It is worse than being fired on by the Spaniards with the Mauser rifle. Any disease that may make a man ready for the undertaker in twenty-four hours is fearful. The treatment with opium and blisters and bromides and morphia and so on perhaps does something, but I doubt it, gentlemen. The disease is an inflammation of the cerebro-spinal meninges. Whether the microbe is the cause or not, we know that he gets there, and we have the inflammation. When there is suppuration in the citadel of the brain and in the bony canal of the spinal column, we are certainly treating an alarming disease. I have been looking for the surgeon to say to treat it as an inflammation anywhere else, open the skull and wash out the brain, and, if necessary, put a drainage-tube from the top of the head to the tip of the coccyx. But I am not going to do it myself. I have been called upon to treat these cases often, but I have no experience except what these gentlemen have given us. The only suggestion I would make is the use of blood-letting, say to the amount of a pint, with the subsequent introduction of the normal solution of salt.

Dr. Archibald Dixon, Henderson: I do not think we know enough about the etiology of meningitis to discuss that point at all, but I would like to say a few things in regard to the treatment, which I think is the most important of all. The diagnosis of cerebro-spinal meningitis is very simple. If you ever see a case of the disease, you will always know it when you see it again. I believe in the fulminant or malignant type of the disease you might just as well try to stop a cyclone as to stop the disease. The only thing you can do is to give morphine to relieve the pain. I had an experience at Henderson with the first case of meningitis we had there, and later with six other cases. Three of these cases died, one right after the other. From thirty-six to forty-eight hours was the limit. The first case was a man who came from Webster County on a wagon load of tobacco, and became very much chilled. He went to bed. When I saw him he was blind; he had right divergent strabismus; he was absolutely comatose, knew nothing, and the only thing I could do was to relieve his pain with morphine. He died in about forty-eight hours. The second case was a young lady school teacher, who was taken sick about midnight with headache, backache, and pains all over. In three hours she was comatose, in six hours blind, and in fourteen hours she was dead. In this case we had the spots. In the first case the spots were about as big as a millet seed and the color of a strawberry. The third case was in a child who was taken sick early in the morning, became blind, with the head retracted, opisthotonos, and was dead before twelve that night. I had four other cases, two in young ladies and another in a child about three years old, and one in a child about eight years old. Those cases recovered. I treated them with hot baths and Crede's silver inunctions over the spine; and I believe hot baths, opium, and the use of this inunction is the best treatment we have for this disease. Two of the cases I have just mentioned I believe were malignant cases. They knew nothing for thirty-eight hours, and yet I believe the treatment saved their lives. One of them is now completely paralyzed in the right arm, and can barely walk, although it is ten or twelve weeks since the case was discharged. The little girl, three years old, was sick six or eight weeks, and has recovered entirely, without any symptom of cerebral trouble. Her mind is as bright as ever. I believe the main thing in these cases is the application of heat by baths and hot applications to the spine, keeping down the pain with opium, and especially the application of Crede's modified ointment of silver, which I think is a twenty-five per cent ointment of silver.

Dr. William Bailey: As chairman of the committee to select subjects I did not have the privilege of making a report, but now I do say, and I think I ought to apologize some for proposing a subject of so difficult solution. We have spent two hours on this now. I selected it on account of its importance, on account of the fact that we know so little about it, hoping that from the districts where it prevailed we might get something that would be of practical service to us, and yet I am free to acknowledge that at this hour I still dread that disease as much as ever, and there is none that I dread more. There is no disease I think that comes to us in which the doctor is more helpless than in this. In regard to the etiology, I think the consensus of opinion of those who are prepared to judge is that this germ, discovered and described by Weichselbaum, is the specific germ responsible for this disease. The difficulty of its entrance has been mentioned. I myself believe that the most ready method by which the germ can reach the membranes of the brain is through the nasal or air passages. I recognize it as being difficult, and yet possible, and this will explain also why this disease, that is a contagious one, is not more contagious than it is. The animal, wild as he may be, is caged so that it is difficult for him to get in, and fortunately very difficult for him to get out. If we had the germs elsewhere than in the closed cavity of the brain and the spinal column, I apprehend that there would be no question as to the communicability of this disease. But I am unwilling to be recorded as believing that any disease propagated and dependent upon a specific germ is not a contagious disease. At one time I resisted the idea of contagion in very many diseases, until finally, by the overwhelming power of the facts deduced in regard to the germ theory of disease, I yielded, and I now believe that every specific disease due to a specific germ is contagious; that one case depends upon another in the same way. I believe this is a specific disease due to a specific germ, and that it is a contagious disease. The difficulty of the germ getting out is the safety of the community. In regard to the management, I hope the time will come when this disease will be successfully combated by means of serum therapy. Referring to the case reported treated by the anti-streptococcus serum leads me to make this remark; the poisons or toxins of any germ are not combated by any toxine except of that germ. I will illustrate it by asking your attention to the successful treatment of diphtheria, in the first few days only, by the antitoxine of diphtheria before other germs are operating. And if any thing is to be done for

diphtheria by antitoxine, it must be while the germ of diphtheria alone is operating, because the antitoxine of diphtheria is not curative for the toxins of mixed infection. I hope the time will come when an antitoxine of the germ of meningitis will be developed that will be as successful as is the antitoxine of diphtheria. And inasmuch as the streptococcus antitoxine is not curative for the infection by any other micro-organism, so I do not believe it is good for any thing except the toxine produced by the germ that produces that condition.

Dr. J. O. Jenkins, Newport : Much has been said here and said well. The disease has been described in all its variations, and they are many. Therapeutics have been gone into, and yet we are where we began. There is really no settled therapeutics or remedy that is active and serviceable in this disease. The streptococcus serum was hailed with delight as being the thing, and while it is good, it has not proven the success we anticipated. Opium has been hailed as the sheet-anchor, and is probably the closest approach to it we have yet found. A late writer on the Continent, in Germany I think, has suggested the use of the soluble citrate of silver in these cases. He reports five cases, with a percentage of 80 per cent cures for the use of the ointment, one ounce well rubbed in along the spine every second or third day. I tried this in one case lately, but unfortunately my patient only got one rubbing; he was dead the next day. I don't know whether it was the patient's mistake or whether it was mine. The author seems to have great confidence in it. Possibly it is a new idea that may help some of our searchers after the truth. I received one idea in the diagnosis of the disease. The gentleman suggested sitting the patient on the bedside and endeavoring to elevate the heel so as to bring the leg out to a straight line. He says it is impossible to bring the leg into a straight line with the patient in that position in this disease, and claims that this sign is not missing in 5 per cent of cases in cerebro-spinal meningitis, while it is almost never found in healthy adults. I have not tried it. I enjoyed the papers, because we have met with a fair amount of this disease in Newport. During this part of the year I don't suppose less than twenty-five cases have occurred, and this morning I saw an infant that undoubtedly has the disease. It was hearty and apparently well yesterday, had never been taken out of the house, never exposed in any way, was nursing a good healthy mother, and yet in the middle of the night it took sick with pain, and undoubtedly had the indications of the disease this morning at six o'clock. That child was not exposed

to any germ disease in any way. There had been no sickness in the house. The surroundings were healthy, no tuberculosis, and I should like to know where that suckling infant got the disease.

Dr. F. J. Yager, Campbellsburg: I just want to ask a question or two. I am exceedingly interested in these discussions. I have had some cases of that trouble. Everybody that I consulted with who are treating these cases said, "they died," and every case I had, or thought I had, died. Now I want to ask these old physicians, these practitioners, some questions in relation to this malignant, fearful, and deadly disease. The question I want to ask is, suppose that you had had your patients thoroughly under the influence, or bring them under the influence of morphia just as soon as you can, with all these other manipulations, and suppose you put them under the influence of calomel. You know the influence of calomel. There is no one among us who has ever killed anybody with calomel, but this disease will kill our patients. Do not disregard any of your other work, but carry it on with all the power and force with which you have been carrying it. These doctors show that they were vigilant, watchful, and penetrating. But did they succeed? No. Now, we have here a malignant form of trouble, and we know the patient will die, no difference how great, or strong, or noble he is. Suppose you bring him under mercury. You know what calomel is, that it is an antiseptic; and suppose you keep him under the influence of that. We know the patient will in all probability die anyhow, but we might try this. And then bring in your sulphate of quinine. You know you never killed anybody with quinine, and you know that quinine is a powerful remedy. I listened to your treatment; I was interested in it all, and I was delighted with it all. And now we will bring in the bromide of potassium. We know its detergent nature and its influence on the brain. We have all tried it. At the same time we may keep up all the other things, for there is nothing contradictory in the treatment. In addition to this, if we have some of the protracted forms, we must keep the functions all alive, watch the heart, use digitalis, if you please, and watch the strength of the lungs. I do believe if I had another case I would try as a foundation the influence of these remedies, which are solid as a rock in our profession. In cholera, years ago, I tried every thing they put up, but I derived most benefit from these old remedies.

Dr. J. W. Irwin, Louisville: The symptoms of spinal meningitis are variable. No two observers seem to have taken the same course in this

disease, in describing and following up its etiology, its pathological anatomy, or its mode of entrance into the human body. We have come here, a great many, disturbed, knowing that an epidemic so serious as the one prevailing is upon us. The earliest and best reports we get of this disease were given us by Vieusseux, 1805, although as early as the second century the disease was referred to. Vieusseux described an epidemic prevailing at that time in Geneva, Italy, and France and Hungary, and various other European cities and countries. The disease reached this country in 1806, in Medfield, Mass., and remained until 1816 in various forms. It was looked upon then as owing to some meteoric condition, it being believed that the influence of the stars or something had brought a curse upon the country. It disappeared in 1816, and reappeared in 1820-23 in this country. It was seen in 1811 in the army in Vermont; it was seen in Pennsylvania in a small village of 6,000 inhabitants, Carbondale, where four hundred people perished of that disease. And so the disease has spread to the eastern and western part of our country, and to the north and south. We find it on the water courses, and on the brows of the mountains; in low localities, in malarial countries, and where there is no malaria at all. It is not a respecter of any age or nationality. The young usually die, and the old, over fifty, usually die. Between forty and fifty the mortality is very high. Various observers have given various reports of this disease, and they find the average mortality is from 60 to 80 per cent. It has been as low as 25 and as high as 90 per cent in some countries. In Sweden 4,000 perished in one epidemic. The disease became domesticated through Europe from 1872 to 1892. In this country we find it has been domesticated, and 2,575 cases died from cerebro-spinal meningitis in the city of Philadelphia alone. In 1891 we find the fewest deaths recorded, numbering only twenty-three from cerebro-spinal meningitis.

Dr. Andrew Sargent, Hopkinsville: I feel that I have no apology to make for not offering you some definite information on this disease. The sum and substance of what we have heard is the sum and substance of what we do not know. And if we would be honest with ourselves and with the public, and when we do not know would say we do not know, I think we would discard much that now confuses us and the public, and would be in a better condition to know more about this malady. Like others in Southwestern Kentucky, I have had my trouble with it. I have been very much edified by Dr. Bailey, who says that

the germ easily finds entrance to the system, and does not easily find exit. Therefore the more cases the safer to the people. Is not that an illogical conclusion? I was sorry to hear an authoritative statement from the State Board of Health to the effect that this disease is slightly contagious, if contagious at all. I had rather they had come out squarely and said this is not a contagious disease. Generally it does not follow the lines of travel over this country. The disease has been found first and chiefly over the sparsely settled districts of Kentucky, where the roads have been bad and the means of communication between the people has been poor. I do not believe we can hold that it is contagious or communicable. As to treatment, I can not offer any thing positive to you. But I would treat it symptomatically. The disease appears in different forms. I believe if you had high fever you would be justified in using antipyretics, the best of which is quinine. If pain is prominent, use opium. For emesis I would put blisters over the stomach and give calomel, ipecac, and soda in small, often repeated doses. I believe blistering does good. It prevents the patient from lying on the spine and back of the head. I believe blood-letting in sthenic cases would be beneficial. I believe with the gentleman who has just been on the floor, that calomel would be good if you had time, but often in the fulminant cases you have not time for any thing.

Dr. Cherry, of Morgantown: I have had an experience of about twenty cases. I have seen no two cases take sick exactly alike. I have seen some take sick with a chill, others with a drawing and contraction of the muscles of the leg, others with a drawing of the testicles, and in various ways. As to treatment, I think opium is the best remedy. We should keep the patient quiet. No one grain of morphia will be sufficient; it will take two grains to keep them quiet. Hot applications to the body will invite the blood to the capillaries. As to Crede's ointment, I have had some experience with it, but I know of no virtue in it. I have used it in several cases. I know nothing else to say in regard to these cases.

Dr. Archibald Dixon, Henderson: I do not agree with Dr. Bailey that the micrococcus Weichselbaum is the cause of cerebro-spinal meningitis, nor do I believe that the disease is any more contagious than malaria.

Dr. H. C. Sharp: We have had a large number of deaths reported in a town of about 600, and therefore the cases must have suffered very much from overcrowding and ill-ventilation(!). I had a case develop

with a chill Sunday and die the following Tuesday. There were two boys constantly in attendance upon the patient, one during the day and the other during the night. The patient died about 3 o'clock on Tuesday, and simultaneously on Friday noon his two attendants consulted me for the relief of intense pain in the head. I feared, of course, that we would have two more cases of meningitis on our hands. I prescribed a calomel purge, followed by a saline, and gave a capsule each containing

R	Acetanilid, ...	}	āā	gr. iiss;
	Sodii bicarb., ...			
	Camphor mon. brom., ...	}	āā	gr. i,
	Caffeine citrate, ...			

taking one every three hours. Each patient recovered from the pain in his head after taking four capsules. Of course I do not say that these were cases of meningitis, but I have adopted that prescription, and have given it to perhaps twenty patients a day for some three weeks following those cases.

Dr. J. G. Brooks, Paducah: I do not propose to discuss any more in reference to the etiology and symptoms of the disease. Somebody said he thought the diagnosis could be made by any one who had seen a single case. It is easy, in my judgment, to diagnosticate cerebro-spinal meningitis, as a rule. I never had much experience with this disease until this year. In our part of the State, the southwestern part, the disease prevailed, especially in our city. We had meetings of the local Society, which all the doctors would attend, and we discussed the subject quite thoroughly. One gentleman, who belongs to the Society, claims to have had very extensive experience with this disease years ago, and he has more than once in our district Society and other meetings discussed the subject, in which he seems to have taken a great interest, claiming to have very great success with the hypodermatic injection of bichloride of mercury. He says the mercurialization is much more marked, and if you can get it soon enough you will have a fair percentage of recoveries. Acting upon that, the major portion of the members in our city commenced the use of mercury, some by hypodermatic injection and others by the use of triturates and powders, until mercurialization was obtained. For the extreme restlessness we found very satisfactory effects follow the subcutaneous injection of hyoscyamine. Cold was applied to the head, and sometimes heat to the extremities was used. With the application of cold to the head, the early introduction of mercurialization, and quieting the patient with hyoscyamine, we had good results.

Dr. Gossett: I would like to mention three cases, two of which I saw in consultation. One of them was a child, seven years old, the daughter of a physician. Those cases seemed to support the suggestion made by Dr. Marvin. One of the cases, that of the little girl seven years old, was diagnosticated as grippe-pneumonia. The symptoms of grippe were more prominent than those of pneumonia. It resulted soon in cerebro-spinal meningitis. The second case was in an adult, and was diagnosticated as rheumatic grippe, the patient having been attacked with muscular rheumatic pains from the tips of his toes to the top of his head. In about thirty-six hours it terminated in cerebro-spinal meningitis. The first case recovered in nine or ten weeks; the second case died about the tenth or thirteenth day. Now, in reference to the treatment: It seems that the gentlemen have discussed the results of the causes. As Dr. Bailey has said, we are after an animal, and we are satisfied that animal has gone into his hole, and, so to speak, has drawn his hole in after him. Dr. Lewis suggests that we should pitch our tents in front of the enemy, and not move until we have made a movement toward victory. Now, in view of the fact that we have a theory that there is an animal there, and it is claimed that we have a remedy in antitoxine, why should we not use that method of treatment? If it is a fact that the cause of cerebro-spinal meningitis is a microbe, why not fight him on that line, and follow the suggestion of the administration of bichloride of mercury in sufficient quantities to secure an antiseptic effect? Or why not seek a remedy along that line in order to remove the cause of the disease, the treatment of which is so difficult with the methods we now possess? The anodynes and cold seem to be the best treatment of the results, but we should be more concerned with the discovery and removal of the cause of the disease.

Dr. L. L. Solomon, Louisville: I wish to take issue with the statement made by Dr. Bailey concerning the therapeutic value of anti-streptococcus serum in cerebro-spinal meningitis. It is not my purpose to defend this serum in the disease in question, but to refer more especially to a difference between antagonism in disease and antitoxines. The antitoxin of diphtheria is used altogether on a different principle, as I understand it, from that of the streptococcus serum in cerebro-spinal meningitis. In the first instance we have an agent that makes the soil non-fertile for the development of the diphtheria bacillus; in the second place we have a substance which is chemically antagonistic to the toxines of cerebro-spinal meningitis. The authorities are agreed

to-day upon this point, namely, antitoxine in diphtheria or antitoxine in any one of the specific diseases acts in one of two or possibly three ways. Either the antitoxine prevents the entrance of the toxine into the soil, or the antitoxine acts as antidotal to the germ, or thirdly, the antitoxine acts antidotal to the toxine. Now, in reference to antistreptococcus serum, the idea is altogether a different one. We have an antagonism such as exists between one of the malignant growths and the serum from the streptococcus erysipelatus. It was stated some years ago that the germ of Fehleisen has an antidotal action in this way, and Dr. Coley and some others of New York City have been applying the statement in practice. This treatment has been of avail. While it is not known what the cause of malignant growths is, it is to be presumed that it is a different cause that brings about facial erysipelas. We can not doubt, however, the therapeutic value of this serum in certain cases of malignant tumors; and I maintain that we have here an antagonism to the disease such as can exist between the antistreptococcus serum and cerebro-spinal meningitis.

Dr. R. M. Jones, Louisville: I have had four cases. The first died, the second died, and the third one died, and I came to the conclusion that when I got the fourth case I would do something, and that it would not die if I could help it. There is a difference between cerebro-spinal meningitis and meningitis pure and simple. I think all cases of meningitis pure and simple—mostly found in childhood—are secondary, most frequently due to profound malarial intoxication, and again to abscess of the middle ear. I began the treatment of my fourth case, a child two years of age, on the ground that it was due to malarial poison or secondary to it. I used the following prescription:

R Kryofin, ... gr. viii;
 Potassii bromid., ... gr. ss;
 Febrilin, ... gr. i.

M. Sig: Teaspoonful every hour until all is taken.

Thus the patient received two grains of febrilin every hour, and sixteen grains in eight hours. I expected the kryofin to reduce the temperature. The effects of the other two you well know. The child had the peculiar outcry, paralysis of the left side following the spasmodic conditions, pupils unevenly dilated, and coma. That in most cases ends the case. The pupil did not respond to light. Opisthotonos in full sense was not present, but the tendency to throw the head back and from side to side was well marked. After the eight doses were taken

I dropped the bromid and gave one grain of kryofin and one dram of febrilin every four hours for forty-eight hours, and then every six hours for the next forty-eight hours. The child is now perfectly well, without any bad results whatever. A number of my patients were from low, damp places, and I would treat all these cases as if due to a certain extent to malarial poison. Whether there is any thing in the treatment or not, suffice it to say the child got well, and I am satisfied it had the same disease of which the others died.

Dr. C. C. Lewis, Stamping Ground: I have been impressed with one idea in the matter of bromide of sodium, bromide of potassium, and even in the matter of morphine, which is perhaps the only thing left us so that we can make the family believe we are doing something for the little sufferer. I have been surprised at the small doses of morphine mentioned. The treatment mentioned reminds me of the fact that most pungent criticism usually comes from the man who has least knowledge of the thing he criticises. We have spent the whole afternoon discussing cerebro-spinal meningitis, and we are occupying the time with a subject that we know but little about, and I am afraid it will be a long time before we do know any thing about it. One gentleman has said that no man could fail to make a diagnosis. That has not been my experience, except when we are in close touch with an epidemic. When we are on the lookout for it we scarcely ever miss it, but when a child comes in from playing and complains of a pain in the finger or toe as the only symptom of cerebro-spinal meningitis, you can not tell me that the disease is easily recognized. There are so many things that may cause pain in the fingers or toes that our attention is diverted. My experience, as far as this disease is concerned, has been a very sad one. All the cases I have seen are now in the grave. It has been my experience that there are two things in the disease we can not overcome—that is, constipation and death.

Dr. D. O. Hancock, Henderson: My impression is that we have learned more of the disease than has been suggested by some in the discussion. It is almost impossible to get at the salient feature of the disease, which is located in the cerebral membranes. We should not, therefore, give up and say we do not know any thing about the disease. We at least know that it is a constitutional disease, a toxemia, almost parallel with pneumonia. We can manage pneumonia, but we can not manage cerebro-spinal meningitis so well. The serum treatment offers something to hope for; at least, we may hope for much in the way of better results in the future.

Dr. J. D. Maddox, Rockport: I wish to say in the outset that I am not a champion of the use of antistreptococcus serum in the treatment of cerebro-spinal meningitis. I have heard of its being used in but three cases. The first two were published by Dr. McNabb, in the New York Medical Journal of February 25th, of this year, to which my attention has been called, and which is responsible for my having used it in the case referred to. That, together with the fact of the high mortality rate and the generally conceded ignorance of the profession of the treatment of cerebro-spinal meningitis, led me to adopt that method of treatment. The patient under my care was as rapidly approaching dissolution as it is possible to conceive. The report of Dr. McNabb's cases coming into my hands, the apparent good results in his cases, seemed to give me a ray of hope, and Dr. Jackson and I readily agreed in the use of it. Did it have a good effect? I think there can be no question. At least we all agreed that the first dose did have a very pronounced beneficial effect. The effect might possibly have been better if the doses had been given closer together. We had but three doses this side of Detroit that I knew of. I was informed that it was not even on deposit in Louisville. After the first dose I telegraphed immediately for a supply. Then the question arose whether to give the two remaining doses close together or to stretch them out until the amount telegraphed for should arrive. As soon as the good effects were being lost appreciably we gave another dose. The fourth dose, given some thirty odd hours after the third dose, did certainly do some good in steadying the pulse. After the fourth dose the pulse steadied down to about 80 or 85, and remained so for several hours. One of Dr. McNabb's cases recovered, and the other one he believed would have recovered except for a hemorrhage of the brain; so that his results certainly give us something to hope for. The following are Dr. McNabb's conclusions:

"1. The antistreptococcus serum has a decided stimulant effect on the nervous centers in meningotetic coma, but the same results might follow a warm saline hypodermoclysis.

"2. It probably increases phagocytosis, and in this way has some antidotal effect on the diplococcus intracellularis.

"3. It probably prevents purulent infection of the exudate, and thus lessens the danger in all cases in which the patients survive the first three or four days.

"4. From my observation of these cases I am quite hopeful that an

antistreptococcus-intracellularis-meningitidis serum can be produced which will have a decided effect in controlling the trouble—toxemia of meningitis—and that the associated effect of antistreptococcus serum after the second day will assist in preventing streptococcic infection exudate.

"5. I am well aware of the fact that the improvement which I saw in these cases may have been a coincidence and not due to the use of the serum, but if it was it was entirely unlike any thing I have ever seen before in such cases.

"6. I may state that in Case 1 the patient would have improved faster if the serum injections had been continued daily for several days longer; and if I should meet with another case like Case 2 I would give from 40 to 60 c.c. of the serum in the first thirty-six hours."

[TO BE CONTINUED.]

Foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The "Oxygen Home;" Oral Teaching of the Deaf; A Novel Dog Show; Inauguration of the Polyclinic; Electric Light Baths; Medical Teaching at Oxford; A New Lunatic Asylum for London; The Ladies' Health Society; A Monster Bazaar; The Sunday Hospital Fund.

Under distinguished patronage a special matinee performance of "Still Waters Run Deep" is shortly to be given in aid of the "Oxygen Home," which was opened in May, 1897, to apply oxygen in the treatment of wounds, ulcers, etc., as a therapeutic agent. The Home has been so successful in its working that the committee is anxious to develop and extend its usefulness by increasing the number of beds available for the poorer classes.

Dr. Tuke recently lent his house at Chiswick for the annual meeting of the Society for Training Teachers of the Deaf. The method adopted by the Society is the pure oral. The Chairman was Dr. Symes Thompson. An interesting feature was the conduct of some demonstration classes by Miss Hewett to illustrate the method of instruction followed at the training college at Ealing, of which she is the head mistress. The committee have opened a new school, which they hope will be made use of by district councils and local school authorities, who under recent legislation have to find suitable educational facilities for deaf children.

A new development of dog shows has been held, one devoted exclusively to pets belonging to members of the medical profession. The London School of Medicine found room for the exhibits at their institution in Brunswick Square, and it was admitted on all hands to have been most successful. The special prize for the best dog the property of a child of a medical man went to Miss Shadwell's spaniel. The show was in aid of the building fund of the London School of Medicine for Women.

The Polyclinic, an institution which aims at giving our medical men the same facilities as their colleagues enjoy in Vienna, New York, and other capitals, was recently inaugurated by a dinner. Sir John Lubbock occupied the chair, the company numbering two hundred and fifty. Among those present were Sir Joseph Fayrer, Mr. Jonathan Hutchinson, F. R. S., and Sir William Broadbent. At the Polyclinic daily consultations will be held for the poor, which will be open to all medical men who are members, the intention being to afford busy general practitioners opportunities of becoming familiar with exceptional forms of ailments and with the best and most modern forms of diagnosis. Sir William Broadbent is the president. Fees will be charged for special classes and lectures, and it is hoped to raise a sufficient sum by donations to equip the buildings. Mr. Jonathan Hutchinson, in the course of his speech, said the new "Poly" would necessarily have a large teaching staff who would have to be well paid, and it would be necessary to find the sum of at least £15,000 if the institution was to be a thorough success.

A hydropathic establishment at Peebles in Scotland has introduced electric light baths on the German model. The bath contains the necessary electric light apparatus, and is lined with mirrors, by which the rays are reflected upon every part of the body. A lid covers the bath, and the patient's head only is not exposed to the action of the light. The heat also from the lamps does its part, for the patient is said to perspire copiously, as if he were in an ordinary Turkish bath. The effect of the treatment is said to be most invigorating.

Mr. Lawson Tait, the eminent gynecological surgeon, during his fatal illness expressed an earnest desire to be buried in a natural recess in the grounds of his country house in Wales, known as the Gogarth Cave, formerly a portion of the grounds of the ancient abbey of that name. The body of the deceased having been cremated, the ashes will be placed in the spot as desired by Mr. Tait.

The Oxford University authorities have determined to authorize the curators of the chest to spend £10,000 in the erection in the University Park of a laboratory to assist the study of pathology. They also provided that a sum of £250 a year for five years should be applied to the equipment and maintenance of the laboratory. Of recent years the school of medicine has been resuscitated at Oxford, a movement due to the efforts of the Regius Professor Sir J. B. Sanderson, the honor recently conferred upon him being greatly appreciated by the whole University.

The county of London has commenced a sixth asylum for patients whose mental condition has brought them under the provisions of the lunacy laws. An estate of 1,060 acres has been obtained, and the old manor house upon it will be utilized as a residence for the medical officers. It is intended to establish upon the estate a working colony for the male epileptics, and one hundred and twenty-seven acres have been put aside for this purpose, upon which eight or nine villas will be erected to accommodate about three hundred patients; these will be employed in agricultural pursuits.

The Duke of Portland has presided over a meeting held at Nottingham with a view of founding for the county a sanatorium for the open-air treatment of consumptives. He said that in England and Wales 60,000 persons were returned as dying every year from tuberculosis, consequently it was every one's bounden duty to do what they could to further the aims and discoveries of scientists, more especially as by so doing they could save the lives of many thousands of their fellow-men.

The medical officer of health for Manchester has provided some interesting statistics of the work done by the Ladies' Health Society. This has now sixteen districts under its care, not including two under the Ladies' Society for Visiting the Jewish Poor. The visitors of the Society have made 8,290 inspections of houses, 320 special reports on sanitary defects, 746 special inquiries on behalf of the medical officer; they have distributed 8,135 leaflets on various common forms of disease, have left disinfectants at 7,543 houses, dealt with 143 cases of neglected children, and assisted 1,075 families in various ways.

The Duke of Marlborough has in memory of his grandmother given £500 toward the cost of providing the new operating theater of the Radcliffe Infirmary, Oxford, with appliances and equipment of the latest completeness.

The monster bazaar in aid of the Charing-Cross Hospital has turned out to be a great success and the most attractive function of the season. The most successful part of the bazaar appeared to be the American bar, where there was scarcely room to move about five o'clock. In the evening a cafe chantant, specially organized, was a great draw; the admission ticket to the bar entitled the holder to a "milady's smile" or other equally harmless American drink. The American stall presided over by Mrs. Choate was a model of tasteful and artistic decoration.

It is hoped that, including this year's collections, the Metropolitan Hospital Sunday fund will have since its foundation in 1873 distributed among the hospitals and dispensaries of London one million sterling. It is thought that the fact of so many rich persons now living out of London in the home counties, and also that so many businesses are converted into limited liability companies, is answerable for the contributions not keeping pace with the increase of population.

LONDON, June, 1899.

Reviews and Bibliography.

Hay Fever and Its Successful Treatment. By W. C. HOLLOPETER, A. M., M. D., Clinical Professor of Pediatrics in the Medico-Chirurgical College of Philadelphia, etc. Second edition, revised and enlarged. 151 pp. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

The author of this little book, after setting forth the various views held in regard to the etiology and pathology of this troublesome disease, sets forth a simple treatment that in his hands has proved uniformly successful. It is simply the thorough disinfection of the nasal cavity with disinfectants of mild character. However, as we follow him through his various prescriptions, which are composite enough indeed, we find that he takes quite as much latitude as the average of physicians in the matter of treatment. One might be tempted to put the author's precepts into the maxim, "You will have success if you try every thing." It is strange, indeed, how so many people suffer and die in this world when there are so many doctors who have "uniform success."

At all events, it must be conceded to the author that in a pleasing way he has presented us about all that is known of the disease and not a little that is not known in the form of opinions from various writers. D. T. S.

Nervous and Mental Diseases. By ARCHIBALD CHURCH, M. D., Professor of Clinical Neurology and Mental Diseases and Medical Jurisprudence in the Northwestern Medical University Medical School; Professor of Neurology in the Chicago Polyclinic, Chicago, etc., and FREDERICK PETERSON, M. D., Clinical Professor of Mental Diseases in the Woman's Medical College, New York, etc. With three hundred and five illustrations. 843 pp. Price, \$5.00, cloth; \$6.00, half-morocco. Philadelphia: W. B. Saunders. 1899.

The authors of this work make no claim other than to have prepared a full and accurate text-book, which is in fact in large measure a compilation. They have sifted the literature of neurology and psychiatry, and molded the result in the light of their own experience in practice and teaching. The work is really two volumes in one, which is indeed one of its chief claims to the attention of students, since the whole subject of mental and nervous diseases may be had in a single volume.

To the thoroughness of the work little can be offered in the way of objection, but the style will not commend itself so completely to all readers. The work of Dr. Church consists too much of short sentences, which, if it helps the understanding, distracts the attention. Where the imagination is aglow and the mind full of a theme, short sentences as brush strokes in a picture may be the mode of expression for the highest eloquence. But frequently recurring independent sentences make the style choppy and destructive of interest.

The part by Dr. Peterson on mental diseases is not so pretentious as the other, and is not equal to other works to be had on the same subject. The

author points out the confusion that characterizes all treatises on this subject, and illustrates his position by his own example. A description of mental diseases would not, it seems to us, be so confusing if efforts were not made to draw hard and fast lines where none exist, and the fact recognized that such diseases are not species but varieties merely.

It must be recognized that definitions are to be general and increasingly general with every new variety embraced. With these limitations, the work is worthy of high commendation. The illustrations and press-work need not be characterized; it is enough to mention the name of the enterprising publishers.

D. T. S.

Practical Diagnosis. The Use of Symptoms in the Diagnosis of Disease. By HOBART AMORY HARE, M. D., B. Sc., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Fourth edition, enlarged and thoroughly revised. In one octavo volume of 623 pages, with 205 engravings and 14 full-page colored plates. Cloth, \$5.00, net. Philadelphia and New York: Lea Brothers & Co., Publishers.

Without claiming to be a year-book, this work nevertheless is brought out each year in a new edition, this being the fourth edition in four years. As set forth in previous reviews, instead of giving the several diseases and then attaching to each a list of symptoms, as has so long been the rule, Prof. Hare reverses the plan in this work and discusses the symptoms first, and then makes application of them to determine the character of the disease. The proceeding is like that of finding the spoor of hunted game, and then tracking it to its hiding-place.

The work opens with an introduction embracing general diagnostic considerations, such as the facies of disease, the attitude of the patient, and other like features that go so far to prove the aptitude and skill of physicians.

The plan of the author leads by an easy road to diagnosis, and to a close observer and good reasoner it makes the ascertainment of a disease not unlike finding a word in the dictionary. We predict for this work many more editions before a better takes its place.

D. T. S.

The Diseases of the Nervous System. A Text-Book for Physicians and Students. By Dr. LUDWIG HIRT, Professor at the University of Breslau. Translated with permission of the author by AUGUST HOCH, M. D., formerly Assistant Physician at the Johns Hopkins Hospital. Assisted by FRANK A. SMITH, A. M. (Cantab.), M. D., Instructor in Medicine in the Johns Hopkins University. With an Introduction by WILLIAM OSLER, M. D., F. R. C. P., F. R. S., Professor of Medicine in the Johns Hopkins University, etc. With one hundred and eighty-one illustrations. 715 pp. Price, \$5.00. New York: D. Appleton & Co. 1899.

The introductory note by Dr. William Osler, with which this work sets out, is the best possible review. Says Dr. Osler: "The completed work seemed in many respects so admirable a text-book that I wrote to Prof. Hirt and asked his permission to have it translated.

"The arrangement of the subjects to which the author refers in the

preface, though somewhat novel, is justifiable and entirely satisfactory, and it is a distinct advance in classification to place *tabes dorsalis* and *dementia paralytica* among the diseases of the general nervous system, instead of in the sections on diseases of the cord and diseases of the brain respectively. The fact which makes the work of value to the teacher, the student, and the practitioner is the graphic description of the anatomy and symptomatology of the different diseases. Where all is so good it is invidious to select, but the chapter on *tabes* is an illustration of the author's lucid and at the same time thorough treatment of his subject. The various affections are treated of also from an advanced modern standpoint. Conflicting theories and passing observations are submitted to a wise criticism, through which the author's large and varied experience is quite apparent."

The illustrations are excellent, and the translation is so well made that it would never occur to one who had not read the title-page that the work was not originally written in the English language. D. T. S.

Progressive Medicine. A Quarterly Digest of Advances and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, etc. Volume II, June, 1899: Surgery of the Abdomen, including Hernia, Gynecology, Diseases of the Blood, Diathetic and Metabolic Disorders, Diseases of the Spleen, Thyroid Gland, and Lymphatic System; Ophthalmology. 468 pp. Price, \$3.00. New York and Philadelphia: Lea Brothers & Co. 1899.

The list of contributors to Volume II are John G. Clark, M. D., William B. Coley, M. D., Edward Jackson, M. D., and Alfred Stengel, M. D.

In the consideration of the use of drainage in abdominal surgery, Dr. Coley states that during the last ten years there has been a gradual tendency in the direction of limiting drainage to those cases in which infection is known to be present. Some would even abandon drainage in the majority of infected cases, trusting to the absorptive powers of the peritoneum. Four successful cases of removal of the stomach are mentioned, but how many failures, or how many operations performed with neither hope nor design of helping the patient, we are not advised.

Professor Berg reports thirty cases of operation for gastric ulcer. The diagnosis in twenty-four of these cases proved correct, and all recovered. And yet Professor Berg asserts that "the majority of the patients which the surgeon actually receives for treatment of gastric ulcer or other benign diseases of the stomach are too far advanced to be benefited by surgical treatment!" Tricomi reports ninety per cent of successes.

Another foreign gentleman, Dr. Fontan, has operated upon fifty-two cases of abscess of the liver by curettage since 1895, with a total of four deaths; the last thirty-one cases with only one death. It would be most desirable to know that none of these gentlemen are in such circumstances that advertisement would be desirable.

Operations for hernia receive extended attention, in which probably the most important thing brought out is the absolute necessity of avoiding

suppuration as far as this possibly can be done. There is still great diversity of opinion shown as to time of intervention of the surgeon in appendicitis, and the effect of conservatism and of radical bias on the one side or the other is still quite evident.

A most interesting chapter is that on the etiology of dermoid cysts, and one that is especially pleasing to the reviewer, who thirty years ago, when investigating the doctrine of evolution, came firmly to the conclusion that these cysts are not inclusions but ovulogenous and due to parthenogenesis, views that have been often contended for in society discussions, reviews, and otherwise.

As a result of the most exhaustive work yet done on this line, Kroemer rejects the inclusion theory of His and adopts and confirms the ovalogenous theory of Wilms. Kroemer, it is true, says it is hardly correct to attribute the development to parthenogenesis, for he says this is a normal process established in lower plant and animal life for the propagation of the species, while in this it is a distinct pathological process, and that the primary instigation to this anomalous growth of the ovum is still a mystery.

The answer to this is that it has never been contended that it is a normal parthenogenesis, but an imperfect reversion to parthenogenesis.

We have not space to pursue further the review of this interesting volume, and it only remains to say that the progressive physician can not afford to deny himself "Progressive Medicine."

D. T. S.

Massage and the Original Swedish Movements: Their Application to Various Diseases of the Body. By KURRE W. OSTROM. From the Royal University of Upsala, Sweden. Fourth edition, revised and enlarged, with one hundred and five illustrations. 168 pp. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

Those who have confidence in massage and the Swedish movement cure can not fail to be pleased with the graphic exposition of all the manipulations the treatment involves as they are presented in this book. So fully and so clearly are the movements presented in the illustrations and the text, it does not seem that any one of fair intelligence could fail to fully grasp the treatment without other help from a teacher.

D. T. S.

A Manual of Surgical Treatment. By W. WATSON CHEYNE, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc., and F. F. BURGHARD, M. D. and M. S. (Lond.), F. R. C. S., Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. In six imperial octavo volumes, with illustrations. Volume 1, 285 pages, with 66 illustrations. Cloth, \$3.00 net. Philadelphia and New York: Lea Brothers & Co. 1899.

A resumé of the preface of this work will supply its most effectual review. For once we have a book ostensibly for the practitioner and not for the student, and it is characterized by full and detailed information as to the best methods of treatment.

Every beginner in the practice of surgery, and large must be the experience of him who is not still in many instances a beginner, has experienced

the want of detailed information, especially as regards the after-treatment of his cases, and has had to learn the best methods of procedure from experience. At such times it is often of the greatest advantage to have a detailed record of the experience of others upon which to base one's work. The authors of this work claim to have put themselves in the place of those who have to treat a given case for the first time, and they have endeavored to supply them with details as to the treatment from the commencement to the termination of the illness.

Reference is made to pathology and symptoms only in so far as it is necessary to render intelligible the principles on which treatment is based, and the various stages of the disease to which each particular method is applicable. Only those plans are described which the experience of the authors has led them to believe are the best. The acknowledged eminence of the distinguished authors is a sufficient guarantee that the standard of the proffered volumes will be of the highest, even if the earnest were not available that is afforded by the volume already offered to the profession. For the young surgeon of the coming era it is equivalent to starting where the best of the passing era leave off.

D. T. S.

Saunders' Medical Hand Atlases. Atlas of Diseases of the Skin, including an Epitome of Pathology and Treatment. By DR. FRANZ MRACEK, of Vienna. Authorized Translation from the German. Edited by HENRY W. STELWAGON, M. D., Ph. D., Clinical Professor of Dermatology, Jefferson Medical College, Philadelphia, etc. With sixty-three colored plates and thirty-nine full-page halftone illustrations.

This volume is by the same author as the "Atlas of Syphilis," another of the present series, and has been prepared along the same lines, the author having been guided by practical requirements and an appropriate choice of material. It has the same exceptional excellence that has characterized the entire series up to the present, its greatest helpfulness being in the matter of diagnosis; the illustrations being so lifelike as to form a perpetual clinic.

D. T. S.

Abstracts and Selections.

THE TREATMENT OF HARELIP AND CLEFT PALATE.—This much-discussed topic continues to be the subject of a good deal of doubt in many minds as to when and how to operate for the various conditions that present themselves. Many of the procedures necessary are entirely within the range of the general practitioner, but there always remains a feeling of hesitation as to the methods most advisable to employ, and the most suitable time for operation. Toward solving such doubts an authoritative review of the recent literature of the subject and conclusive statements as to what seems best in the therapeutic suggestions that have been recently

offered by various writers will be of the greatest value to the busy practitioner.

Such a review of the treatment of harelip and cleft palate is given by Dr. J. Chalmers DaCosta in *Progressive Medicine*, the new quarterly review of advances in medicine, of which Professor Hare is editor. From it we gather that the tendency is more and more toward early operation. The third or fourth month used to be considered the earliest suitable time to operate. Murray now counsels operation in the fourth week; Mumford and Heath think it should be undertaken not later than from the sixth to eighth week. Where cleft palate exists it is not operated upon so early. The harelip is operated upon alone, and the persistent pressure made by the closed lip helps to lessen the gap in the growing bone. The operation on the cleft palate is put off for awhile, but this, too, not nearly so long as it used to be. If the closure of the defect is delayed until the child has learned to talk, the peculiarities of speech, especially its offensive nasal character, will never be corrected. The authorities are agreed, then, that a cleft in the soft palate should be closed about the sixth month, and in the hard palate during the second year.

The practical suggestions collected from the recent literature of the subject by Dr. DaCosta are very valuable to the ordinary practitioner. Space will permit us to give but a few of them: The use of the knife in operation rather than the scissors, because the latter crushes tissue more, leaving its vitality impaired, especially at the edges where this is so important for subsequent union; the avoidance of pins or heavy sutures in securing proper apposition after the operation is advised, though these are faults of technique in this matter that we fear have been so ground into the present generation by text-book and teacher that failures of union due to these crude early methods will still continue to be frequent. The suggestion by Mumford, as to anchoring the nares with shot wire, will remove a very common cause of failure due to the child's inevitable tendency to "turn up its nose" at and after the proceedings.

In double harelip it is advised to remove the intermaxillary bone by sub-periosteal operation a week before the operation on the lip. If left it is liable to undergo necrosis. Its removal leads to some flattening, but this will not be great if the bone be removed by sub-periosteal operation, and if but one side of the harelip be operated upon at a time. Among the directions for the operation for cleft of the hard palate we note these pre-operative measures of precaution from Owen which are sometimes forgotten, but the practical value of which it is easy to see: Never operate unless the child is in the best possible health; remove carious teeth, adenoids, and enlarged tonsils before operating, and operate whenever possible in fine weather, so that the patient can get out of doors soon afterward. The neglect to remove such ready sources of infection as carious teeth and those harborers of microbes, the irresistible tissues of adenoids and enlarged tonsils, is very probably the source of a good many of the failures in uranoplastic osteo resection.

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H. A. COTTELL, M. D., M. F. COOMES, M. D., Editors.

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This Journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The Editors are not responsible for the views of contributors.

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JOHN P. MORTON & COMPANY, Louisville, Ky.

EDITORIAL REINFORCEMENT.

With this issue the editorial department of the American Practitioner and News secures a veritable reinforcement. Dr. Martin F. Coomes, Professor of Physiology and Ophthalmology in the Kentucky School of Medicine, assumes with the present editor an equal share of the editorial work and responsibility.

As a practitioner, teacher, author, and editor Dr. Coomes is too well and too favorably known to require introduction to our readers.

He brings to this work in learning, experience, and general good favor with the guild an equipment which must render doubly effective our battle for truth in science and harmony among the votaries of our calling.

Dr. Coomes gives valuable accession to our working force, and strengthens our title to professional favor.

CHANGES IN JOURNALISM IN LOUISVILLE.

The Louisville Medical Monthly no longer exists as such, but in the future will combine with the Louisville Journal of Surgery and Medicine, and be issued as the Louisville Monthly Journal of Medicine and Surgery. Dr. Samuel Cochran, its former able editor, retires

from the field of journalism, and is no longer in any way connected with the Louisville Monthly Journal of Medicine and Surgery. Dr. Cochran's retirement from the field of journalism will be much regretted by his many friends, and particularly by the alumni of the Louisville Medical College, with whom he is a great favorite.

ST. JOSEPH'S INFIRMARY.

This time-honored institution, which is located on Fourth Street, in the most delightful portion of the city of Louisville, has recently added to its spacious apartments nearly fifty rooms, six wards, and another operating-room, a total of one hundred rooms, eight large wards, and two elegant operating-rooms, making it by far the most complete institution of its kind in the South. It has grown steadily, and while it is under the control of the sisters of Nazareth, religion plays no part in its management—all creeds fare alike. The sisters in charge have but one aim in view, and that is to do their duty. The present superioress, Sister Auria, has greatly improved the service of the whole institution in every particular, and richly deserves the congratulations she is now receiving from its patrons.

The rates are moderate. Rooms, including nursing and board, range from \$8 to \$10 per week. Ward board, which also includes nursing and same fare, \$5 per week. The sisters have been taught by the best medical men in Louisville, and are thoroughly competent to all kinds of nursing.

Notes and Queries.

At a recent meeting of the Illinois State Board of Health the following resolutions were adopted. It is evident that the Board intends that all applicants shall fare alike, and this is as it should be. Others could profit by imitating the good example set by the Illinois Board :

"Whereas, Section 2 of an Act to Regulate the Practice of Medicine in the State of Illinois, and to repeal an act named therein, approved April 24, 1899, in force July 1, 1899, gives the State Board of Health discretionary power as to granting certificates to graduates of legally chartered medical colleges in Illinois in good standing, as may be determined by the Board; and,

"Whereas, It is evident, notwithstanding the discretionary power given the Board, that the true intent and purpose of this act is to require all per-

sons to prove their qualifications to the State Board of Health by passing an examination; therefore, be it

"Resolved, That all applicants for a State certificate to practice medicine and surgery in the State of Illinois, who are graduates of medical colleges in good standing, as may be determined by this Board, shall, before receiving a certificate, be obliged to pass an examination such as contemplated in Section 2 of an Act to Regulate the Practice of Medicine in the State of Illinois, in force July 1, 1899.

"Resolved, That the phrase 'medical college or institution in good standing,' in the first paragraph in Section 2 of the Act to Regulate the Practice of Medicine in the State of Illinois, in force July 1, 1899, is hereby defined to include only legally organized, properly conducted medical institutions, having a sufficient and competent corps of instructors and ample facilities for teaching, dissections, ambulatory and hospital clinics, which conform to the requirements relative to the preliminary education of matriculants, the course and period of study, the number, character, and length of lecture terms, the duration of attendance on hospital and clinical instruction, which obtain in the majority of medical colleges in the United States.

"The Illinois State Board of Health, however, will not consider in good standing, after January 1, 1900, any medical institution which does not require of all students (excepting graduates of reputable colleges of arts and sciences, or reputable colleges of dentistry, pharmacy, or veterinary medicine, to whom one year's advanced standing may be granted), as a condition of graduation, an attendance of four full courses of lectures of at least six months each, in four separate years, no two courses commencing or ending in the same calendar year of time.

"Resolved, That no medical college issuing a catalogue of announcement in which are contained misrepresentations respecting its teaching, clinical or hospital facilities, its faculty, or its courses of study, or false representation as to the number of students matriculated or in attendance, will be regarded as in good standing."

KENTUCKY SCHOOL OF MEDICINE.—The Forty-third Annual Commencement of the Kentucky School of Medicine was held July 1st. Considering the fact that the school requires attendance upon a four years' graded course, the class was unusually large, and the school is in a flourishing condition. This school is the pioneer spring and summer graduating school, and with its large new hospital and thoroughly equipped laboratories adjoining the college, it is prepared to offer facilities equal to any school in this country.

"THREE-YEAR SCHOOLS."—Schools requiring attendance upon but three courses of lectures can no longer have the respect of the medical profession, or be recognized by State Boards of Health or State Examining Boards. The Kentucky State Board of Health has adopted a ruling refusing to allow any physician to practice medicine who graduated from a

school that allowed any student to graduate who had not attended as many as four courses of lectures in four separate years, and the beginning of no two courses must have been within the same twelve months. Nearly all the States have passed laws that will not recognize a graduate from any school that does not require attendance upon four courses of lectures, and in the future no student can afford to graduate from any school that does not conform to this universal demand of the profession and the people.

BEECHHURST.—Beechhurst is the name given a private sanitarium recently opened by Dr. Barton W. Stone, formerly superintendent of the Western Lunatic Asylum of this State. Dr. Stone has been connected with this institution, as superintendent and assistant superintendent, for twenty-six years. He has also inspected most of the important sanitary institutions in the old world.

Dr. Stone's long experience in the management of the insane, and his gentle, positive disposition most admirably fit him for the management of a private sanitarium. He is thoroughly conversant with the manners of all classes, which knowledge enables him to take advantage of their peculiar whims and irregularities.

Beechhurst is east of the city of Louisville, is easily accessible by electric railway, and is near the line of a most beautiful carriage drive. It is a large, modern building, with all conveniences of steam heat, water, gas, and electricity. There are accommodations for forty patients. Dr. Stone has an accomplished assistant in Dr. Ernest Rau.

HEROISM OF A NAVAL SURGEON.—In his report of the recent action in Samoa, when both British and American naval officers were killed, Captain White, of the Philadelphia, speaks as follows concerning the conduct of Passed Assistant Surgeon G. A. Lung, United States Navy: "At times when the fire from the concealed natives was thickest, and at all times by his example, he encouraged the young and inexperienced men to the proper performance of their duty. On the completion of the work of his profession he assumed command of our blue-jackets and marched them to the United States Consulate."—*Boston Medical and Surgical Journal*.

OFFICERS OF PENNSYLVANIA SOCIETY FOR THE PREVENTION OF TUBERCULOSIS.—The following officers of this Society were elected April 26, 1899: Guy Hinsdale, M. D., President; A. H. Davisson, M. D., Secretary.

THE THIRD INTERNATIONAL CONGRESS OF OBSTETRICS AND GYNECOLOGY.—The Third International Congress for Gynecology and Obstetrics is to take place at Amsterdam from the 8th to the 12th of August, 1899. The questions for discussion will be the following: First, the surgical treatment of fibromyoma; second, the relative value of antiseptics and improved technic for the actual results in gynecological surgery; third, the influence of posture on the form and dimensions of the pelvis; fourth, the indication

for Cesarean section compared to that for symphyseotomy, craniotomy, and premature induction of labor. Doyen, Howard Kelly, and Schauta will report on first question; Bumm, Richelot, and Lawson Tait the second; Bonaire, Pinzani, and Walcher the third; and Leopold, Pinard, Pestalozza, and Fancourt Barnes the fourth.

TWO CENTENARIANS.—Gardner Upham, of Windham, Vt., is reported to be one hundred and one years old. He is the oldest man in Southern Vermont. Miss Mary Spooner is stated to have died recently at the age of one hundred and five. She was a resident of Acushnet, Mass., and is said to have lived under the administration of every President of the United States.

THE ROENTGEN RAYS IN THORACIC DIAGNOSIS.—The Roentgen rays are steadily coming into more constant use by the great experts in physical diagnosis, in the recognition and differentiation of intrathoracic conditions. Last year at the meeting of the German Medical Congress Dr. Schott, of Nauheim, demonstrated by a series of most careful skiagrams that even our knowledge of so delicate a subject as heart dilatation could be greatly aided by this new diagnostic method. In the proceedings of this year's German Medical Congress, an abstract of which appeared recently in the Medical News, it will be seen that the distinguished heads of German clinics frequently turn to the X-rays for help in conditions that were formerly supposed to be fully revealed by older methods of physical diagnosis.

In the diagnosis of aneurism practically all authorities are agreed that the Roentgen skiagrams are of the greatest service. In cases in which there are suspicious symptoms in the thorax, and especially if there is any, even the slightest, reason to suspect aneurism of the descending aorta the X-rays are a most reliable adjuvant.

There are heart conditions in which a series of skiagrams furnish information that is of the greatest value for prognostic as well as diagnostic purposes. This, to be sure, is the more exact and delicate side of the application of the Roentgen rays, and one that requires special training, but the time spent in acquiring the technic for thoracic diagnosis can not fail to be profitably expended—a fact that will become more and more apparent in the near future.—*Medical News.*

THE PRODUCTION OF SEX AT WILL.—Friedmann (*Klinisch-therapeutische Wochenschrift*, 1898, No. 30, p. 1156; *Gazette hebdomadaire de medecine et de chirurgie*, January 8th), as a result of investigation into this problem, says that in order to resolve it these three questions must be answered: 1. Is it possible by artificially modifying the material exchanges to deflect from its primitive direction the normal course of the physiological functions of the organism? 2. Can any explanation be given of the fact that in certain families only boys, and in others only girls, are produced? 3. What are the most appropriate means to influence the material exchanges in the repro-

ductive system of the animal organism so as to produce at will a given sex? The first question has been amply answered in the affirmative by Darwinism. As to the second, he says that women with a tendency to the exclusive production of one or the other sex present signs of a degeneration so marked as to constitute a pathological condition, a sort of androgenous or gynecogenous cachexia.

Haeckel has shown that the phenomena of heredity must be attributed to physical and chemical causes, and that the sexual characters must pre-exist in the original germ before the definition of the genital apparatus. The androgenous and gynecogenous cachexiæ must be meant to imply that the female element in the first, or the male element in the second, is destroyed by its opposite in some organico-chemical process. Consequently, to answer the third question, it is necessary to seek for either the male or the female element deposited in the ovule, a sort of toxalbumin, so that one of the two elements may predominate over the other. Empirically he finds in ovarine the substance to combat the female, and in spermine that to overcome the male, element. By submitting a female guinea-pig to the administration of tablets of ovarine from October 26, 1897, to February 15, 1898, he succeeded in obtaining the gestation of a single male normally developed. Another female similarly submitted to subcutaneous injections of spermine became pregnant with a single female. The uniparous pregnancy, he says, seems to indicate a lowered reproductive power.

There is a popular belief that excess of sexual ardor in woman produces boys, while where the excess exists on the man's side, girls are commonly the offspring. The great preponderance of girls among first children and of boys among "love children" is regarded by some as partly confirmatory of this view. In the light of Friedmann's researches it would seem possible that the relative degree of sexual ardor or vigor in the parents is at least a contributory factor in sex production.—*The New York Medical Journal*.

FOR NEPHRITIS.—The *Revue medicale* for December 14, 1898, quoting the *Journal de medicine de Paris*, attributes the following prescription to Neumann:

R Nitroglycerin, ... gr. 15;
Rectified alcohol, ... gr. 150;
Distilled water, ... gr. 600.

M.

Eight drops to be taken in three divided doses in the day. If the medication is well borne the daily amount may be raised to twelve drops.

A GARGLE FOR LACUNAR AMYGDALITIS.—The *Journal de medicine de Paris* for February 26th credits the following formula to Moure:

R Borax, }
Potassium bromide, } each 5 parts;
Carbolic acid, ... 1 part;
Glycerin, ... 50 parts;
Infusion of althæa, ... 450 parts.

M.

—*New York Medical Journal*.

Special Notices.

SANMETTO AND SUBSTITUTES.—I have used Sanmetto, also substitutes, but must say Sanmetto is the only remedy where it is indicated. It is all claimed for it. I use it every day.

G. A. SMITH, M. D.

Henton, Ill.

W. A. WARD, M. D., Edinburg, Ark., says: I have used Aletris Cordial in threatened miscarriage in several instances with the best results; one case in particular, the lady was of nervous temperament and very easily excited, but by giving Celerina, combined with Aletris Cordial, for a short time, she passed over it safely. I am of the opinion that any physician prescribing Aletris Cordial, in such cases as it is indicated, will not be disappointed in the result.

A USEFUL PRESENT.—W. R. Warner & Co., of Philadelphia, New York, and Chicago, are distributing free to doctors and druggists a very complete list of drugs, giving apothecary and metric doses. They are arranged in convenient columns and printed on coated linen cloth, size 22 x 14, for hanging at the prescription counter or in the doctor's office for ready reference. It will be sent to any doctor or druggist upon request. Drop them a postal for it.

UTRO-OVARIAN PAIN.—Prompt relief, unaccompanied by habit or untoward after-effect, is what the up-to-date practitioner desires most in these cases. If the pain is over the lower border of the liver, or lower part of the stomach, or, in short, be it headache, sideache, backache or pain of any other description caused by suppressed or irregular menstruation, it will yield to two five-grain tablets of Antikamnia. This dose may be repeated in an hour or two if needed. For very prompt relief it is advisable to crush the tablets and swallow them with a little wine, diluted whisky or toddy.—*Ohio Medical Journal.*

PEPSIN is undoubtedly one of the most valuable digestive agents of our *Materia Medica*, provided a good article is used. Robinson's Lime Juice and Pepsin and Arom. Fluid Pepsin (see advertisement) we can recommend as possessing merit of high order.

The fact that the manufacturers of these palatable preparations use the purest and best Pepsin, and that every lot made by them is carefully tested before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from Pepsin.

AN IMPORTANT OBSERVATION.—Prof. Burney Yeo, of London, states in his latest work on clinical therapeutics that many of the common forms of diarrhea are accompanied by excessive acidity of the intestinal contents, and that they may be promptly cured by antacid remedies without the use of astringents. These forms of diarrhea are associated with the growth and multiplication of micro-organisms, which induce intestinal fermentation and consequent local irritation from decomposing food products. The therapeutic indications in these cases are clear, viz: Check intestinal fermentation, neutralize acidity, and overcome the existing atonicity and catarrhal inflammation of the intestinal mucous membrane. Lauder Brunton speaks highly of the value of glycerine as an intestinal antiseptic. In combination with digestive tonic alternatives and antacids, as it is in Gray's Glycerine Tonic Compound, it fulfills all the existing indications, and, moreover, promotes the digestion and assimilation of food, so that the normal nutritive processes are speedily re-established. It is of particular value in diarrhea occurring in people of impaired vitality, as it not only cures the intestinal disturbances, but it also restores tone to the enfeebled system.

THE PURDUE FREDERICK CO.,

No. 15 Murray Street, New York.

THE AMERICAN PRACTITIONER AND NEWS.

"NEC TENUI PENNĀ."

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NO. 2.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

CHARLATANISM.*

BY AP MORGAN VANCE, M. D.

I should say the medical charlatan has existed since the earliest history of medicine, and has always flourished. The reason for this is very plain, and is aptly illustrated by the old anecdote of Dr. Abernathy and the quack, who was upbraided by the doctor for his charlatanism, but who justified himself by asking the doctor of the thousand men who daily passed his office how many he supposed were intelligent and of sound, well-balanced judgment, and upon being answered probably one in the hundred, replied: "You may have those ten, but I will take the nine hundred and ninety fools for my patients, who for their folly deserve to be quacked upon." In these progressive times one would suppose that people would learn enough to discriminate, especially when their health, and many times their lives, are in the balance. It would seem that people who were educated and in other matters of life were very discreet and sensible, would not be the supporters of such fakirs; but this is not the case, for we all know that men distinguished, and often men in high places, are the most enthusiastic, giving their names under and their pictures over certificates of the wonderful cures made by the most outrageous nostrums—ministers, lawyers, congressmen, governors, and so on *ad nauseam*. These certificates are so numerous that they must be a great source of income to the daily papers, as well as the religious weeklies and monthly magazines, indicating in a very reliable way how much of the poor people's money goes without any return. We can feel sure that the expensive

* Read at the meeting of the Kentucky State Medical Society, May 18, 1899.

advertisements would not appear unless it paid the advertisers. One curious thing I have noticed in these certificates of quacks' medicines is the complete disregard of the ordinary privacies of life. What would the people think of a regular physician who would go around telling that Mrs. So-and-So had been afflicted with a bad case of whites for years, and that he had cured her? Letters with the name and address of the writers, giving a detailed account of symptoms, are regularly published, the above being among the mildest expressions often seen. The following quotation from a recent number of a weekly paper on this part of the subject I think rather to the point. I take it to be a parody on some other item on the pill habit. I do not endorse the style, but most decidedly do endorse the sentiments expressed in the editorial. It says in part:

In a late number of a popular magazine I see portrayed, with all the skill of the expert illustrator, a beautiful young woman with her hair neatly braided down her back. She is arrayed in a nightgown which is a dream. Like the goddess in New York harbor, she holds aloft a lighted candle, and in the other hand—a pill. If the drawing is to scale, the pill is about the size of a baseball. The import of the picture is that the lissome beauty is about to swallow the baseball. Beneath the picture is the legend, as near as I can remember: "My complexion is perfect because I take one of Billson's Bully Bilious Bombshell Boluses every night before retiring."

Now, while incidentally protesting against the tendency to realism in art on the part of the bilious Billson, I wish to call attention to some facts first brought to my notice by a prominent Eastern physician. He stated to me that all reputable practitioners lament the alarming increase of the pill and dope habit, and that those people who make a practice of irritating their systems with the thousand and one nostrums recommended by the illustrated magazines, family weeklies, and religious journals are paying heavy penalties in physical, mental, and moral decadence. These periodicals teem with warnings that we must at once lay in a stock of Jig Syrup, Early Prisers, Col. Carter's Little Lifter Pills, Dood's Farsaparilla, Rip'em's Tabarets, Pink Pills for Pale Plumbers, Liar's Sherry Pictorial, Dr. Fierce's Golden Medical Freelovery, etc., if we would have good complexions, sweet thoughts, and long life. Too many people believe this; the habit begins by a gentle dalliance with Lady Cagliostro's After-dinner Assuager, assured by all the stall-fed aristocracy of Europe; it grows and grows; two pills, three pills, a box; a change of treatment becomes necessary, and soon another change; the poor victim runs the entire gamut of nostrums, and, an almost total wreck, is obliged to seek a specialist.

Without paying attention to the secular periodicals—which are known and expected, with a few exceptions, to be indifferent and entirely mercenary—let us look at the so-called religious press, which ought to be con-

ducted upon a higher plane. Taking those which happen to be at hand, I find that the Outlook affects Terror's Seltzer Accipient; the Churchman, Dr. Mule's Nervine; the Christian Register, Acid Fulminate; the Christian Leader, Dr. Fierce. The Christian at Work works for Dr. Fierce and others; the Presbyterian pushes Prune Juice; the Christian Advocate apparently advocates Early Prisers and Rip'em's Tabarets. The Baptist Standard is boldly waved in favor of Dr. Gall's Windy Water Cure Self-Treatment, while the Examiner makes a favorable report upon Jig Syrup and Prunes. The Rev. Dr. Talmage's Christian Herald seems somewhat undecided, and gaily toots for Dood, Beat'em, Dr. Gall, and others. The Southern Pulpit not only holds out all these great gifts to mankind, but introduces "a sure cure for petulance" in the person of Dr. Jingle (the name should sell the blessing, one would think), whose discovery is prayerfully recommended by seven clergymen, three of them D. D.'s.

Not long since, in a court of law, Fig Juice was acknowledged to be innocent of figs. Those who take Prune Juice and congratulate themselves that they are full of prunes are only so in a figurative sense, having really encompassed a drastic dose of aloes. Keeley graduates will do well to avoid the various "tonics," and those who do not care to acquire the morphine habit had better leave nervines, compounds, and other soothers to the editors of the journals which so persistently proffer them. As it seems after all to be with these gentry only the same old question of money, the religious titles given their papers being a cloak, I would suggest the formation of a trust. Rates could then be raised, clerical certificates distributed upon an equitable plan, and expenses much reduced. As it would hardly do to call the association a trust, I would suggest the following title: "The United Association of Quack, Fake, and Fraud Assisters, Unlimited." Motto: "Aloes, alcohol, opium, and dough."

So much for the patent medicine charlatans, all of whom should be prosecuted for obtaining money under false pretenses.

The two great fads to which the superstitious and credulous people are now looking for miraculous relief are Christian Science and Osteopathy. These cults are headed by two of the greatest charlatans of any age, and have less basis in merit even than the patent medicine frauds, which have less than none. The science (?) of osteopathy is evidently an outgrowth from the old cult of natural bone-setters, and has done more real harm, and caused more suffering and more deaths than is ordinarily the case. This is due to the savage brutality to which patients are subjected. If a regular physician or surgeon was to subject a patient to the rough usage that the fool followers of these osteopaths daily go through, he would be mobbed or have to answer to the law for malpractice. It is simply beyond com-

prehension that people will submit to such treatment in these enlightened times, especially when they see that no good results. I had a little patient, the son of a minister, who suffered with hip-disease, with abscess. After combating the superstitious and foolish interference of the parents and grandparents with their patent medicines, dirty poultices, etc., I succeeded in getting the deformed limb straight, the abscess had healed, and the child was able to walk on a protective splint. Every thing looked bright for a good result. Much to my surprise they bundled him up and took him to Kirksville, Mo., and shortly thereafter I received a copy of the Osteopathic Journal, published there, which gave a history of the treatment of this case. They found the child suffering with a dislocated spine and a dislocated hip. The barbarous machine applied by a man with a reputation for treating bone diseases was immediately removed, and by two or three skillful manipulations they succeeded in reducing both the spine and hip, and the dear little fellow was immediately able to walk, with the aid of his crutches. This little miserable is now hopelessly deformed, and struggles about the streets by the aid of a long staff. The same minister, I understand, recommended from the pulpit in the most extravagant terms this infernal quackery. I know he visited and wrote to other parents advising them to seek relief in similar cases at Kirksville. This, I take it, is a fair example of the results of the treatment by these frauds. The question might be asked here, How is to be expected that the ordinary people are to avoid falling into the clutches of such charlatans when their ministers, judges, governors, and prominent men in other walks of life recommend them? I have endeavored to discover some little basis of merit in the practices as evidenced by their literature, but have failed so far. Massage might do some good in certain cases, if properly applied, but they do not suggest or describe this procedure on any scientific basis. I will here quote the definition of this science as promulgated by A. T. Still, its discoverer, as he calls himself. If the members succeed in making any sense out of it, I wish they would "hold up their hands":

I feel to answer through the Journal of Osteopathy questions that are asked by thousands of persons annually. And as time adds days and years the number of persons who ask those questions have multiplied to such greatness in numbers that it is absolutely impossible to find the time to answer them in detail. And I am not sure that I can answer all of them through the Journal, but will try and so arrange that a few of the most

common ones will be answered as best I can. By my method of reasoning I arrive at the conclusion that man was, after receiving his form, like unto the world on which he dwells, and that in his body could be found all the mineral, vegetable, and animal substances that could be found in the beasts of the field, the fowls of the air, fishes of the sea both great and small; in short, all that was contained in this and all other planets and beings, from the throne of God (Himself included), to the lowest form of animated beings; that in the human being all attributes of mental and physical were represented in kind. With this conclusion I proceeded and did obtain what I have proclaimed and proven to be truths universal in kind and action, submitting to and being governed by one common law. I reasoned that all effects as are shown in disease with the result of the productions of the truths of the one great common law, mind and motion expressing themselves through matter. Motion is an effect of life with its powers. Disease in any form or presentation was another effect. Conception of beings, diseases, and worlds were the biogenic answer of the wombs of nature either large or small, believing while I was in the chambers of sober and intelligent nature where honest reason only can dwell, that it was safe to follow the teachings of that principle that made no mistakes that I could detect. . . . The world's system of cures by drugs are now and always have been based on three principles, namely: opiates, purgatives, and stimulants. And the difference there is in the schools of medicine are about all told in the quantities to be given. All give deadly poisons, but try to get the same results. Allopathy starts the ball to rolling by big pills, eclecticism the same, but claims that vegetable medicines are better than mineral preparations. Then the homeopath closes by pills of less size, and if they fail, he drives morphine under the skin and spills it in the fascia, which carries the opium to the brain and produces effects by paralyzing sensation. And on these three principles all depend.

The author of this very lucid definition of osteopathy lives at Kirksville, Mo., where the original school is located. Several other schools have been started at Kansas City, Chicago, here in Kentucky, and elsewhere, and have governmental sanction. In Kentucky there is a law requiring those practicing osteopathy to pass a certain examination, but the law has not been productive so far of any great results. The school at Franklin continues, and several osteopaths are practicing elsewhere in the State, never having submitted to the examination. There are several cases in the courts now, and possibly one before the Court of Appeals, as a man practicing all kinds of quackery along with osteopathy resisted the State Board of Health, and succeeded in getting an injunction in a Warren County court. This issue is now before the higher court or will soon be carried there, and will test the present law.

It would seem that as soon as an osteopathic school is established at a place it becomes a boom town. Kirksville has grown out of all proportion. The school collects a good round tuition fee in advance from every student, and they have large classes. The flocking of people is almost equal to a pilgrimage to one of the shrines of the old world, and the place grows in consequence. One of the most pitiable facts connected with the practice of all quacks is that they get hold of many incurables whom the conscientious regular physician has frankly informed of this fact, and by promises hold them long enough to bleed them of all their means—old people with fractured hips, cancer cases, locomotor ataxia; and, as I mentioned before, osteopathy plays the mischief with the poor little suffering children with spinal and hip diseases by their brutality in attempting to reduce the imaginary dislocations of the spine and other joints.

Why do the people allow such treatment? Where is their common sense? What is the fundamental cause of this condition of things? It has been recently stated that more than half the people in the world are worshipping fetiches. May it be because so recently the other half were in the same box and are still influenced by the old atavistic superstitions and jump at things mysterious and miraculous? What tends to foster these ideas? Is it the fault of the scientist who fails to teach understandingly, or is it the Church, which teaches them that miraculous things have happened in the world and may be expected to happen again?

Dr. Thos. H. Manly, of New York, in a recent paper on this subject, says:

There is no subject, perhaps, to which one may turn that presents so many intricate and singular features as that of the illegal or irregular practice of the healing art. It has been said that "the practice of medicine is as old as history itself, but the science of medicine is scarcely fifty years old." It may be added that the charlatan is older than either, and that, although the sciences have unfolded many of the mysteries of vital phenomena, and widespread educational advance over the entire civilized world has enlightened the masses, still it can not be denied that with all the revolutionizing influences following in the wake of these changes the demand for the empiric or the mountebank has not in the least diminished; nay, if we read aright the signs of the times, the eager avidity and ceaseless craving of communities for novelties, for new systems and creeds, for mysterious remedies and nostrums totally devoid of any warrant of scientific value, we must be convinced that education has rather given quackery

deeper root and wider growth. Nor can it be said that the spread of the religious spirit, and the greater adherence to dogmatic creeds, have in any special manner lessened its growth or augmented the faith of the people in scientific medicine.

During the last quarter of the nineteenth century, a period of America's greatest intellectual, scientific, and industrial activity, sectarian medicine has made extraordinary progress; its most notable conquests being among the cultivated and aristocratic members of society.

The American Medico-Surgical Bulletin has something to say on this point in an editorial:

Any unbiased analysis of the success of quackery in all its protean forms will reveal the fact that ignorance, fear, and self-interest are the forces that keep it alive. Only so far as the growth of civilization is a growth in intelligence among the masses does it in any degree check the career of the charlatan.

Why can not something be done toward getting rid of quacks? The one answer to this is, that too many people are financially interested in the maintenance of quackery. When vested interests are opposed, honor, honesty, truth, and progress must step aside. Quacks are liberal advertisers, and always have been so. Newspapers and magazines lead the public mind. As long as this condition lasts, the masses are not likely to learn the truth very soon. But for the influence of the newspapers it would be an easy matter to force education upon all who attempt to treat the sick. Once educated, and they would themselves lose faith in their present methods and use better ones. Once get rid of the present baneful influence of the press, and it will work a revolution of more importance to the life and health of the race than any thing that has happened for centuries. There is but one way to bring about such a change. Medical men must take into their hands the education of editors. If the average newspaper-editors, and particularly those who edit religious papers, could be shown how positively immoral their present course is, a start would at once be made toward better things. Until they are taught, there can be no hope for the masses.

When so able a writer and thinker as the editor of the Washington, D. C., Times can make no better a defense of the quack than he did in his issue of October 26th, under the heading of "The Practice of Medicine," it is evident that the task would not be so great as it at first might appear. He seems to think that the credulity of the masses in medical matters is itself a proof of the inefficiency of the medical profession. He tells us:

"It is surely unbecoming in medical journals to ridicule the credulity of the masses of mankind in the light of the many fallacies that have ruled the profession and in the light of its present uncertainties in therapeutics. What the profession has learned of value is that most of its dogmas were fraudulent. Any man who should attempt to cure disease in this day by the methods of the regular profession of only a century ago would be con-

demned as a quack more mischievous than all the army of 'healers' who have found some use for a discovery of which they exaggerate the importance as much as the profession undervalues it. In spite of its greater knowledge of physiology and psychology, the medical profession neglects the virtues of moral treatment, and thus opens the way to persons who magnify them. It makes large claims to exclusive authority in healing, because of studies that have as little apparent influence in the treatment of disease as the knowledge of microbes."

The Memphis Lancet for November, 1898, while bewailing the present depraved level of the American press and endorsing the recent movement, the outgrowth of which has been the organization of "The American Society for Press-reform, and the Direction in which Press-reform is Needed," says:

We are sure all will agree that the aim of such an organization is highly commendable, although we are compelled to admit that the accomplishment of that aim will probably never be attained while the daily papers pride themselves on publishing "all the news," and will probably bring their combined influence to bear against the passage of any law to curtail their liberty in this respect. But there are other practices to which they are addicted, and which, to our mind, are a greater evil than the publication of the details of crimes, criticism of officials, and the betrayal of State secrets. The greatest of these is the unbridled freedom with which they print advertisements of means for the prevention of conception, advertisements of abortionists and remedies intended to induce abortions, and remedies for the cure of venereal diseases, "lost manhood," etc., expressed in such unmistakable terms that "he who runs may read." Could any thing be more villainous? We wonder if the owners and managers of these papers are conscious of their enormity. We wonder if our legislators ever take their minds from a contemplation of their chances for re-election long enough to realize that such practices are an offense against decency; that the fulfillment of the promises made in these offers are crimes against the State, and the papers which give publicity to these people and these agents are "accessories before the act."

But such things are, and have been, and will be, till the moral sense of the community rises to a plane which it now does not know. The financial return to the paper which publishes these advertisements is probably not five dollars an edition, and yet for this "Judas coin" the owners and managers prostitute their souls, insult their patrons, and fling defiance in the face of the State.

We doubt if the publication of these facts will deter a single paper from accepting such advertisements, or influence a single person to withdraw his patronage from such as do. So long as the law does not forbid it, so long as "lovely woman stoops to folly," and is willing to pay to be

shielded from its consequences, so long as these people are prosperous enough to pay for space in the paper, just so long will these outrageous advertisements continue to appear.

I might enter into the discussion of the religious institutions, the shrines, Lourdes knocks, the sepulchre of the Saviour, etc., all giving evidence of the wonderful power of the superstitions handed down from the ages gone by, which are fostered by the same craving on the part of the people for the miraculous. As Zola puts it in his book, "Lourdes, the grotto, the cures, the miracles are, indeed, the creation of that need of the lie, that necessity for credulity, which is a characteristic of human nature."

What is the remedy to be applied for the correction of these evils? Bacon says, "Truth is the daughter of Time," but it seems to me that here we are at the end of the nineteenth century since Christ, and the lie is still with us. I will close with a quotation from an address by an Indiana physician, Dr. Jameson, on the science of medicine and its relation to the people :

To legislate against the dangers to which the victims of the pathy and cure delusions are subject, to protect such against themselves, to suppress these so-called schools by law, would be right and wholesome. But we are reminded that what is right and wholesome is not always expedient or practicable. We are warned constantly that the remedy may be worse than the disease. Legislation would not and could not remove the conditions that make possible the various forms of medical charlatanism. Legislation against insanity can not cure insanity. It can, if it be wise, control its victims, relieve society from the menace which they are to it, and in a large way, and sometimes in apparently remote directions, tend to alleviate the conditions that produce the results deplored. Development is rarely round and even. Many can see life steadily, but "to see life steadily and to see it whole" is the good fortune of but few.

Civil pride and duty are so much developed as to make it almost impossible to accomplish much in the direction of saving people by law against the fanaticism that trifles with the public health and destroys individual life. The spirit of liberty so much needed to rescue mankind from obvious forms of slavery and subjection, like all things in our ken, has the defect of its qualities, and we must accept with equanimity the idea that liberty of thought and action shall reach a condition that is really little short of anarchy. If a spurious coin were uttered in Massachusetts, the whole force of the commonwealth embodied in its laws would be invoked to suppress it and to punish the offender, because the utterance vitiates property and robs people of their material wealth. But a spurious sect may utter doctrines ruinous to health and to life itself, demoralizing where

it is not destructive, sapping the sanity of people where it does not destroy their lives, and no measure of restraint or edict of abolition must be adopted!

In this condition it behooves us, and all who seek to know the truth and to regulate their lives by it in order that they may attain the fullest possibility of life, to inculcate a more rational method of living. The caution can never be too strenuously made nor too often repeated that in times of expansion, enormous expansion, such as the present is, it is not only wise but necessary that the mental and nervous organization should be brought to terms with it. We should seek by every means better to educate the public concerning the powers and limitations of the human organism, and the possibilities, not assumptions, of medicine; in other words, apprise them of the attainments of rational medicine. They should know that the only succor in disease must be the result of scientific attainment based on a knowledge of and obedience to the stable laws of nature. We are nearly out of the belief in or hope of relief by special providence.

It is our duty—the duty of all who seek the truth—to maintain steadfastly that, were the special providences so ardently sought and so fervently importuned realized, the orderly processes of nature would be deranged, and chaos would come. So now realization of dogma and pathy and school would mean simply that science must come to an end; that deduction must fail in its result; that truth must not be truth; that a thing that is necessarily one and the same, true under all circumstances, must no longer be so, but must give way to the erratic attainments of a pathy or cure that must be different in every part of the world, varying with every practitioner, the special creation of agent or patient, differing constantly as these differ.

It is the duty and privilege of the medical profession, and equally the duty and privilege of all who hope for the advancement of mankind, with unalterable firmness and with limitless patience to enforce again and always the simple faith that there is no short cut or royal road to any thing, but only a steady, sure step holding fast the ground won, toward the truth in all things, as the patient endeavor of man may win truth by the reverent study of nature.

LOUISVILLE.

NORMAL SALT SOLUTIONS IN SURGERY.*

BY JAMES B. BULLITT, M. D.

The use of the normal salt solution in surgery was the direct and natural result of the efforts at transfusion of the blood itself. This procedure is very ancient, was never any thing more than a curious experiment, however beautiful theoretically, and has quite deservedly been abandoned now entirely. The transfusion of blood from one animal to

* Read before the Kentucky State Medical Society at Louisville, May, 1899.

another of the same species, or to an animal of a different species, depended on the assumption that the receiving organism was able to appropriate and utilize the blood received as such, *i. e.*, that the blood-cells so transfused would continue to live and exercise their functions just as they did in the circulation of the host from whom they were obtained. It has been shown that such assumption was fallacious; in animals of like species, even, the blood-cells are not so received, but perish and break down, and so throw on the organism an additional eliminative strain. For animals of a different species it has been shown that the blood serum is often toxic, producing sometimes, if in sufficient amounts, even fatal effects. Furthermore, transfusion was always a difficult operation because of both the technical difficulties as well as that of securing proper and willing individuals from whom to obtain the blood.

These facts, added to the danger of the procedure from sepsis and embolism, have, as has been stated, practically completely relegated blood transfusion to the interesting medical history of the past, and have substituted therefor the use of the normal salt solution.

Infusion of milk and other albuminous fluids is an old procedure, but at this time the term infusion has come to signify the injection into the circulation of a normal (0.6 per cent) saline solution of a sufficiently high temperature.

According to Schachner, this particular procedure was first methodically called attention to by E. Schwartz in 1881, but there were isolated instances of such use before this time. However, it has only been since about 1889 that very general familiarity with the normal salt solution has been apparent; and even to-day it is believed many lives might be saved if surgeons and practitioners were universally cognizant of the importance of the procedure as a life-saving measure and were more familiar with the simplicity of its technical employment.

In surgical practice the normal salt solution is useful in several ways: First, in case of extreme hemorrhage, to replenish the circulating medium and by refilling the blood-vessels permitting the mechanical acts of the circulation to proceed; second, in case of extreme shock, to stimulate the heart and arteries so that the blood which has accumulated and stagnated, especially in the large abdominal vessels, may again be put in active circulation; third, in cases of faulty and insufficient excretion on the part of the kidneys, to stimulate excretion, both by the kidneys and by the skin; fourth, in cases of sepsis, and perhaps

in cases of drug toxemia, to favor by dilution and increased elimination the throwing off of the toxic materials.

It may be here remarked that this last usage is not so clearly defined nor well established as the first three; but many claims, supported by some cases, have been made of its great use in such conditions as diabetic coma, pneumonia, purpura hemorrhagica, ulcerative endocarditis, pyelitis, carbon-monoxide poisoning, mushroom poisoning, extensive burns, toxemia due to colon bacillus, painters' colic, carbolic acid poisoning.* In such conditions it is usually recommended to withdraw by venesection a certain portion of the blood, replacing it then by the normal salt solution. Such possibilities of its use are of the greatest interest, but beyond their mere mention they can not concern us further here.

While the physiological action of normal salt solution has not been elaborately studied, Bovée states that it seems to be determined that while it increases the volume of the blood and lessens its specific gravity, it at the same time stimulates the cardiac ganglia and arteries, and accelerates the circulation of the blood. The increased arterial tension furnishes more nutrient blood to the heart through the coronary arteries, and in like manner it stimulates the nerve centers. In the same way all the organs are made to do more work, and especially is it true that elimination through the kidneys and skin is markedly increased. Locally its action on the blood-vessels themselves is to stimulate contraction of the unstripped muscle fibers, and in this way it exercises a hemostatic action.

Reilly, quoting Delbert, states that it tends to produce hemostasis by stimulating clotting; but other writers hold the view already mentioned, that the hemostatic action depends entirely on the stimulation to contraction of the smaller arteries.

Dawbarn has insisted that the maximum of stimulation to both heart and blood-vessels is attained by injecting the salt solution at a temperature as hot as the hand can bear (110° to 120° F.), and cites the undoubted effect of hot intra-uterine douches in post-partal hemorrhage in support of his position. It has been shown that globulin only coagulates at 158° F. and serum albumen at 162° F. Experimentally, it has been shown that saline solutions of much higher temperatures, as high as 165° F. even, are well borne by the dog.

The salt solution can be introduced in several ways, thus: By injection into a vein, intra-venously; by injection into an artery, intra-

* Thomas F. Reilly, M. D., in *New York Medical Record*, November 12, 1898.

arterially; by injection beneath the skin into the connective tissue spaces, hypodermoclysis; by injection into the rectum and colon; by leaving the fluid in the abdominal cavity after laparotomy. Each of these methods has its advantages and special indications, which will be considered presently.

Hemorrhage has always given the surgeon the greatest concern. Before the days of absorbable ligatures and the temporary elastic tourniquet it was the *bête noir* of surgery; and next to the advances which have resulted from the application of the knowledge of bacteriology to the uses of surgery, nothing has been more striking than the improvement in the technical ability to prevent hemorrhage, in the first place, and to deal with it successfully when it does occur, in the second place.

Death from hemorrhage may occur as a result of an absolute loss of blood, in which event not enough blood remains to support the vital functions, even if this amount could be kept in active circulation; or death may occur as a result of a relative loss of blood, the fatal issue in such case depending on the disturbance of the mechanism of circulation. Thus, if an insufficient amount of fluid is in the vessels, it becomes impossible for the heart and elastic arteries to transmit the force of the heart's contractions to the distant portions of the body, and as a consequence the blood which is left in the vessels fails to complete the circuit; nutrition and stimulation of the heart and all the centers fail, and death ensues.

Hunter states that in lower animals, even after the loss of one half or two thirds of the total amount of blood, death does not ensue if the circulation is maintained by supplying an indifferent fluid in place of the lost blood. He calls attention to the fact that in some cases of pernicious anemia the number of red blood-cells may be reduced to ten per cent of their original number, or even less, and yet the disturbance of respiration may be little marked. Such losses, however, are sustained gradually, and are therefore better borne than if they occurred rapidly as in sudden hemorrhage.

If more actual blood could be supplied rapidly in the first instance of the absolute loss of blood, it can readily be conceived that life could be saved and prolonged even after extremest losses. But as it has been shown that the blood-cells as such are not accepted by the receiving organism, we must conclude that whenever the absolute loss of blood is so great as to render the remaining blood insufficient for nutrition and stimulation, even if kept in circulation, then death must

ensue. When the loss is not so great the mechanism of the circulation can be restored by injecting into the circulation an indifferent fluid approaching or exceeding in quantity the blood lost. After such injection the rapidity with which the red blood-cells are resupplied by the organism is very surprising. A normal salt solution has been found most useful for the purpose, in that it supplies the fluid needed without doing any damage to the remaining blood. Plain water when injected directly into the vessels, on the other hand, extracts the hemoglobin from the red cells, and so acts as a poison.

Dawbarn reports a case where a mistake was made in experimenting on a dog, the animal dying in a minute after receiving a considerable amount of plain water so injected.

When the volume of blood in the vessels has been diminished by hemorrhage, a ready absorption of saline fluid takes place through all the routes mentioned. Where only moderate blood-loss has been sustained, it suffices for usual purposes to leave several quarts of the fluid in the abdomen in the case of laparotomy, or to inject a similar amount into the bowel with a long rectal tube. When the hemorrhage is more severe it is more quickly efficient to inject as much as a pint or a pint and a half into the connective tissue with the hypodermic needle and permit it to get into the circulation more quickly by lymphatic absorption. When the hemorrhage is sudden and copious, and there is impending danger of failure of the circulation, the injection should be made into a vein, or, as Dawbarn first suggested in 1892, directly into an artery, preferably the femoral. This last mentioned procedure seems at first glance a heroic one, but the operation has been performed a number of times without accident and with marked success.

Circumstances might arise which would render its use important or imperative, and therefore the simplicity of its technique should be understood. For general use after hemorrhages which are not too severe the subcutaneous method (hypodermoclysis) is undoubtedly the simplest and most useful. By its use there is little danger of overloading the circulation and further handicapping an already embarrassed heart. This danger exists in the incautious forcing into the circulation large quantities of saline in a short space of time by the intravenous or intra-arterial routes. The technique of these procedures will be taken up later.

It is a question of great importance to decide whether or not saline infusion should be used during the continuance of a concealed hemor-

rhage. Its physiological action is to increase the arterial tension, as we have seen, increasing thereby the blood-supply to the heart and stimulating the cardiac ganglia. It stimulates the blood-vessels locally, causing contraction of the arteries, and therefore acting in the case of the smaller vessels as a hemostatic. But this contraction would not be enough in the case of the larger vessels to effect hemostasis, while the increased arterial tension would make the bleeding all the greater.

Nature's method of arresting hemorrhage in the case of the larger vessels is by bleeding the individual until the circulation is so far weakened that a clot may form in the end of the divided vessel and no longer be extruded because of the pressure from behind. To increase this pressure by infusion would therefore defeat the very purpose intended.

In hemorrhage from smaller vessels the infusion would act directly as a hemostatic by stimulating contraction of the vessels. Thus in hemoptysis and in typhoid fever the infusion would be directly hemostatic if the vessels involved were not large, but might serve to increase the hemorrhage by increasing the arterial tension if the vessels were large.

When a concealed hemorrhage is suspected the saline infusion may be employed as a means of making the differential diagnosis. If the condition of the pulse is due to hemorrhage, saline solution by hypodermoclysis or by rectum will be readily taken up, and the pulse will be for the time much improved. If this method be employed, preparations should be made for immediate operation and securing the bleeding vessel. Otherwise the hemorrhage may only be further stimulated, with a fatal termination.

If hemorrhage be not present, the probability of the rapid absorption of the saline solution and a consequent notable effect on the pulse is much diminished.

The quantity of saline solution which should be used after hemorrhage varies from a few ounces to a few quarts. The pulse-rate and volume and the general appearance of the patient must serve as the guide. Generally speaking, there is little danger of infusing enough of the solution after hemorrhage to cause an overburdening of the circulation. But it must be borne in mind that such overburdening can occur if the heart be very weak. Therefore it is usually safer to repeat infusions of small quantities rather than to attempt to make one large infusion serve.

Shock is a condition resulting from various kinds of trauma, as the crushing of a limb, a surgical operation, the concussion resulting from heavy blows; it may result also from the exhibition of a general anesthetic, and sometimes from profound emotions. It is a frequent accompaniment of accidents or operations attended with considerable hemorrhage, though it may occur without any blood-loss at all. It is characterized by a reflex paralysis of the heart and of the large blood-vessels, especially the abdominal, through the medium of the vaso-motor system. Death not infrequently results from this condition before reaction can be established.

In shock without hemorrhage there is no diminution in the total quantity of the circulating medium; but, as has been mentioned, it is not in active circulation, being collected for the most part in the large abdominal veins. The necessity here exists to cause more fluid to enter the heart and to stimulate the flagging circulation. In such a case efficient absorption from rectum or by the lymphatic vessels (hypodermoclysis) can not be expected to take place. Therefore direct intravenous injection must be employed. The heart is weak and must not be overwhelmed by a large quantity of the solution, but should rather be stimulated to renewed strength and activity by small quantities of very hot saline solution (120° F.), repeated at intervals if necessary. Just as soon as improvement in the pulse is established, infusion should be discontinued, as the amount of blood in the vessels is quite sufficient for all needs, provided it can be made to circulate.

In shock with hemorrhage the treatment by saline infusion does not differ from that already described in the case of hemorrhage itself.

In case of insufficient excretion through the kidneys, stimulation of this function can usually be accomplished by saline injections into the bowel, from one to three quarts being so employed once or twice daily. By this means osmosis seems to be notably increased, and at the same time the skin acts much more freely.

McBurney reports a case of acute suppression of urine following removal of a large calculus from the kidney in which the urinary secretion was re-established by these injections. It is a matter of very common experience with abdominal surgeons to have the amount of urine following operations very notably increased by the employment of the saline solution at the time of operation, either by leaving a large amount in the abdominal cavity or by injection into the bowel.

These two measures have the further happy feature that they very materially diminish the post-operative thirst, which is oftentimes the most distressing feature of the first few days following a laparotomy.

Clarke has suggested with apparent good reason and practiced with marked success the so-called gravity drainage of the pelvis after laparotomy. The practice is based on the observations of some Italian anatomists that there exist certain intra-abdominal currents which tend to carry fluids from the pelvis upward toward the diaphragm, where the principal absorption takes place, the peritoneum covering the diaphragm being much more extensively provided with lymphatic mouths than that of the remainder of the abdomen. Further, it is well recognized that bacterial growth is possible in proportion to the number of bacteria present and the amount of soil available. Clarke therefore concluded that if the abdomen after laparotomy were left filled with saline solution, and the pelvis were then elevated and so kept for the first few days, the intra-abdominal currents would then tend to lift any exudates, as serum and blood, out of the pelvis and carry them toward the diaphragm, where their more rapid absorption would occur for the anatomical reasons already stated.

Further, any bacteria which might be present in the pelvis in sufficient numbers and concentration to be a menace would be diluted and disposed of in the same way. At the same time the presence of the saline fluid in the abdomen would tend to prevent adhesions by floating the intestines away from the bared surfaces resulting from the operation, and the other benefits already mentioned would result from the absorption of the saline solution.

In sepsis Reilly,* quoting a number of writers, notably the French, regards intravenous infusion as almost a specific. It is necessary to use comparatively large quantities and frequently to repeat the infusions.

Pozzi, who is a strong advocate of the treatment, believes that its *rationale* lies, in the first place, in the increased power of resistance due to the raising of the intravascular pressure and to the increased elimination which results therefrom; and, further, in the stimulation of the production of new blood-cells on the part of the blood-making organs.

The technique of the various procedures which have been described for the introduction of the solution is comparatively simple, and the necessary apparatus is readily improvised. The solution is prepared by adding a heaping teaspoonful of table salt to a quart of boiled

* T. F. Reilly, *Medical Record*, November 12, 1892.

water, and then straining. To be exactly accurate, to each quart of water ninety-two grains of chloride of sodium should be added. Any good specimen of water will serve, provided always after straining there are no foreign particles left floating in it. It is a significant fact that distilled water without the addition of salt is much more destructive to the red blood corpuscles than is ordinary water, evidently because of the traces of various salts contained in the latter. For general purposes it is convenient to make the solution in double strength, sterilize it by boiling, and then set it aside in cotton-stoppered bottles for the emergency, when the 0.6 per cent solution is quickly prepared by adding an equal amount of hot boiled water.

For rectal use the ordinary fountain syringe can be employed, together with a rectal tube or a long and large catheter. Or a piece of rubber tubing, a funnel, and a pitcher serve the same purpose. Or the Davidson syringe may be used. By rectum, of course, the scrupulous asepsis does not have to be observed which is essential in the remaining methods to be described. But this feature is common to all, that the maximum stimulation to the circulation and the organism is only attained by a high temperature of the solution, as hot as the hand can bear, 110° to 120° F.

When the fluid is employed intraperitoneally it is introduced at the last moment, just before the last stitch is tied to close the peritoneum.

For subcutaneous use the apparatus necessary is a good-sized hypodermic or aspirator needle and a piece of rubber tubing and a glass or metal funnel or a fountain syringe. The fluid is allowed to run through the needle, and it is then plunged through the skin into the connective tissue about the thighs, beneath the breasts, over the abdomen, or about the neck. In fact, almost any convenient locality answers. Of course the skin must be made scrupulously clean before the needle pierces it. An elevation at arms' length suffices ordinarily to make the solution flow into and distend the connective tissues; sometimes an elevation of six or more feet may be necessary. As the fluid enters, the skin pouts out, and when a tumor the size of a small goose-egg has formed it is wise to withdraw the needle and insert it in another place, meanwhile rubbing the tumor with a greased hand to favor its speedy absorption. With usual aseptic precautions this method is devoid of danger.

The intravenous method is sometimes one of some difficulty, especially to one inexperienced in general surgical technique. The

trouble is that in many cases in which it becomes necessary to employ the intravenous method a good deal of hemorrhage has occurred, and the veins are collapsed, and are not so easily identified. Usually a vein about the flexor aspect of the elbow is selected as most convenient; it is dissected out, and a double ligature, preferably of small catgut, is passed beneath it. The vein is now partially cut either across or longitudinally, and when it has become certain that the lumen of the vein has been entered, the distal portion of the vein is tied with one of the ligatures. The solution has previously been prepared in some form of fountain syringe with a blunt-pointed canula; a small-pointed glass medicine dropper answers the purpose well if nothing better is at hand; a sharp-pointed needle should not be used, as it is likely to pierce the wall of the vein, even if it primarily enters the lumen. The fluid is permitted to begin to run, and while it is running the canula is inserted into the vein. This avoids the possibility of air being injected along with the solution, which is undesirable, though apparently not as dangerous as many writers have assumed. Thus Hare experimentally injected 40 c. c. of air into the vein of a dog so that it went directly to the heart, and no perceptible impression was made on the circulation. Ordinarily it suffices to hold the container, which is preferably of glass, on high at arms' length; it must be borne in mind that it is not desirable to have the saline solution enter the circulation too precipitately. Therefore the canula should be of small size; further, the flow can be very well regulated by the elevation of the reservoir, holding it higher with a very small canula and lower with a larger canula.

The second ligature is now tightened down over the proximal end of the vein with a double turn, holding the vein in close apposition to the canula. When the canula is finally withdrawn the ligature is further tightened and tied, a few skin sutures and a compress completing the operation. As the fluid flows through the vein from the tube the vein is noticeable as a raised line. On the contrary, if the fluid misses the vein and enters the subcutaneous tissue about it, the latter offers a marked and circumscribed swelling.

Bovée states that probably the maximum amount which can be safely introduced into the veins or subcutaneous cellular tissue is one ounce per minute. By this slow introduction most of the alarming symptoms and conditions which have been observed to follow the introduction of the salt solution can be avoided. Among these may

be enumerated dyspnea, pulmonary edema, headache, vertigo, somnolence (probably from ventricular edema or cerebral hyperemia), mental excitement, delirium, and hallucinations. The more serious one of overwhelming the heart has already been mentioned.

There only remains to be discussed the intra-arterial method proposed and practiced in a few cases by Dawbarn. Bovée only mentions the method to say it should never be used. Reilly states that "on account of the danger of sloughing, the intra-arterial method is seldom employed." Dawbarn contends that there is practically no danger of sloughing if the technique which he describes is followed. This technique is as follows: The femoral artery is felt for beneath Poupart's ligament, and is located and fixed with the finger and thumb of the left hand on either side of it. A hypodermic needle, of good size preferably, is now pushed through the tissues into the artery. As the lumen of the artery will accommodate a lead pencil, Dawbarn states it is not easy to miss it. As the needle enters the artery, a bright red thread of blood wells up through it. The rubber tubing of the Davidson or fountain syringe is now slipped over the needle with the solution running, thus avoiding the introduction of any air. The Davidson syringe is now vigorously pumped, or the fountain syringe is elevated six feet or more. The small size of the needle prevents the fluid from entering the artery too rapidly. In this way it requires about one-half hour to inject a pint of the solution.

In support of the safety of this measure Dawbarn cites the needling operation proposed by McEwen, of Glasgow, for aneurism, and employed with partial success by Dr. Wyeth in 1891. The aorta was pierced by thirteen needles, which were left in place twelve hours, and the operation was afterward twice repeated. Dawbarn argues with some apparent reason that if thirteen needles can be left in place in the wall of a diseased vessel for twelve hours, there would not seem to be much danger in leaving a single needle for a single hour in the wall of a healthy vessel.

Tillmanns, however, states that "Kummel warns against infusing salt solution into an artery. After the infusion with a glass syringe of about five hundred grammes of a six-per-cent alkaline salt solution into the radial artery, gangrene of the skin followed, rendering it necessary to amputate the forearm between the middle and lower thirds."

The method here described is, however, quite a different thing, and

its misadventure need scarcely deter us from employing Dawbarn's technique if the necessity of the case demanded it. Certainly, however, such necessity will not often arise.

The intra-arterial method is centrifugal, whereby the possible danger of introduction of air is diminished. On the other hand, the intra-venous method has the great advantage of carrying the infused solution directly and quickly to the heart, and so utilizing its heat for the maximum of stimulation to the circulatory organs.

One further use of the salt solution remains to be mentioned, viz., as an irrigating fluid for general purposes. It is believed to be less irritating than plain water.

LOUISVILLE.

THE STOMACH-TUBE.*

BY H. H. ROBERTS, M. D.

From the period that Kussmaul introduced into practice the stomach-tube until the present time, its progress has been unretarded. It has been of untold value in the study of gastric diseases and of great assistance in their diagnosis and treatment.

With all the modern methods of diagnosing chronic diseases of the stomach, none is so reliable as the stomach-tube, for by its use we are able to make a chemical and microscopical examination of the contents of the stomach after the test-breakfast, and at any time we can obtain the contents of the stomach in a rapid and safe way without any material inconvenience to the patient.

Its increasing popularity is such that at the present time it is no longer the particular property of the specialist, but is used throughout the medical world. The claims of advocates of new scientific achievement are so often extravagant that they are misleading to many, and a valuable and useful instrument is put into disrepute, or great harm is done the patient, by the indiscriminate use of such an instrument. The more judicious student will by cautious observation test their value and the field to which they properly belong.

It is true that the great advancement we have made in the knowledge of gastric diseases is due to the introduction of modern technique, but that which may be indispensable from a diagnostic standpoint may become a dangerous thing when used as a routine treatment. Wide experience is essential to thoroughly grasp the true

* Read before the Kentucky State Medical Society, May, 1899.

meaning and use of any one thing, but even the most experienced prefer to share responsibilities with some one who has given the matter more exhaustive study than himself; but unfortunately we find enthusiastic followers of many particular lines of treatment until they become so much abused that we find the indiscriminate use of them has either prejudiced our patients against them or irreparable harm has been done. Within the domain of medicine to-day I believe there is nothing that is more abused, especially in some parts of the country, than the stomach-tube. Many use it because it is recommended for stomach trouble, others because the patients request it. In fact, there is a tendency among patients troubled with stomach affections to treat themselves in this way because it has been recommended to some other patient, and, if the other fellow has kindred symptoms, he gets himself a tube and begins the washing, and, when not benefited, every other patient within a radius of several miles will be prejudiced against the use of the stomach-tube; if relieved, he recommends it to others.

I know of an instance where a patient had lavage used for a few weeks, and being greatly benefited from its use, and having become an expert in manipulating the tube, washed the stomachs of the whole family every morning before breakfast as a prophylaxis.

This harmful use of so valuable an article is not confined to the laity, but frequently physicians recommend the use of the tube and often wash the stomach several times a day, and thereby great harm is done.

Let us speak briefly of the modern stomach-tube and the proper technique of its use. The tube which I prefer and believe to be the best on the market is a modification of Ewald's, which consists of a soft rubber tube about thirty inches long, to one end of which is attached a glass funnel; the other end is open and has two slits on either side half an inch long and one fourth of an inch wide. Above the side openings are made a number of perforations going through the caliber of the tube and about one sixteenth of an inch in diameter. The side slits prevent the tube from becoming occluded from mucus, and the small perforations act as a sprinkler, bringing the fluid into contact with a large portion of the stomach. The tube should have a white mark about sixteen inches from the stomach end, which is the average length from the teeth to the stomach.

There are many apparatus for washing the stomach, such as the Leube-Rosenthal apparatus, Hemmeter's double current stomach-tube,

etc.; but as these apparatus are more adapted to the use of the specialist, we will not discuss their utility. The technique of using an ordinary stomach-tube is very simple. The first and most important procedure is to secure the utmost confidence of the patient; explain carefully the whole operation; do this even to the most minute details, and if the patient perchance should be unusually timid, an opportunity of observing with what ease a more experienced patient introduces the tube will be of valuable assistance. Avoid the use of all oils or greasy lubricants. Seat the patient in a straight-back chair, have him to lean his head slightly forward (most patients throw their heads backward), wet the tube with warm water, place back on the tongue, and tell the patient to swallow; the tube will readily enter the esophagus, when it can be rapidly passed into the stomach. Time may be saved with patients with tender fauces, especially those who smoke a great deal, by spraying the throat with a mild solution of cocaine, 2 to 4 per cent, but this procedure will seldom be needed. After the tube has entered the stomach, avoid moving the tube, as this brings on nausea and vomiting. Have the patient breath deep and regular, and attract his attention to something else by a pleasant conversation or some object. Plain warm water is the most desirable fluid to wash the stomach with. Many drugs have been recommended to use in the lavage, but I find that while many may be beneficial, it is best to use plain water for lavage, and afterward, if necessary to use drugs, to use Einhorn's gastric spray apparatus. By raising and lowering the funnel end of the tube the stomach can be filled and emptied many times without any discomfort to the patient.

The rapid strides which have been made in the knowledge of gastric diseases are due to the introduction of modern technique; we then, as physicians, should not abuse their valuable assistance nor let our patients abuse them. Under no circumstances should a patient be given a tube to use himself, and should not be used by the physician until a positive diagnosis has been made by an examination of the filtrate of the stomach or other means. The stomach-tube should never be used in very weak patients or old persons while in the erect position, but treat this class of patients either in the recumbent or reclining position. The tube should never be used without a thorough examination of the patient's thorax. Penzoldt reports a case where the patient was to have had his stomach washed by means of the tube in the morning, but for some reason was delayed until the next morning; in

the interval the patient died from the rupture of an aortic aneurism into the esophagus.

The use of the tube as far as gastric lavage is concerned is but seldom required. From a diagnostic standpoint the tube is indispensable. The indiscriminate washing of the stomach is capable of much harm, and is often positively injurious to the patient. In cases where there are large quantities of mucus present, the tube should be used, and a mild alkaline solution used in the fluid to facilitate the dissolving of the mucus. By requesting the patient to shake himself occasionally during the operation the fluid will be brought in contact with all parts of the stomach wall, and can be cleansed thoroughly. The tube should not be used more than every other day, or best two or three times a week. Use from one to three quarts of water or until the wash returns clean. In cases where there is a stagnation of food in the stomach, resulting from either muscular weakness or stenosis, causing dilatation of the stomach, the use of the tube and lavage is of great benefit. Quite large quantities of fluid are often necessary to thoroughly cleanse these cases where there is marked dilatation. The tube is contra-indicated in all constitutional diseases, viz :

- (1) Heart disease, especially where there is defective compensation.
- (2) Myocarditis.
- (3) Angina pectoris.
- (4) Fatty heart, especially the advanced stages.
- (5) Aneurism.
- (6) Recent hemorrhages, such as pulmonary, gastric, vesical, apoplexia, renal, rectal hemorrhage, etc.
- (7) Pulmonary tuberculosis.
- (8) Cerebral hyperemia.
- (9) Advanced cachexia.
- (10) In the continuous fevers, typhoid, remittent, etc.
- (11) Where there has been a recent hematemesis.
- (12) Ulcer of stomach.
- (13) Carcinoma of the pylorus, especially when there has been vomiting of the coffee grounds.
- (14) In all cases where there is a tendency for the gastric mucosa to bleed easily.
- (15) In those cases where the gastric affection is secondary to some more important primary disease.

The many conveniences, and especially the great aid the stomach-tube has given us in the exact methods of scientific analysis of gastric diseases, have, like all important therapeutic means, been abused, but will ever prove a benefit to suffering humanity in scientific hands, used in a scientific and judicious manner.

PARIS, KY.

Reports of Societies.

KENTUCKY STATE MEDICAL SOCIETY.*

[CONTINUED FROM PAGE 25.]

Dr. Royster: I just wish to add, that at the suggestion of my friend I used Crede's silver ointment in my case.

Discussion of "Charlatanism," by Dr. Ap Morgan Vance.

Dr. B. W. Smock, Louisville: I feel like it would be criminal to sit here and listen to that most excellent paper without some of us putting ourselves on record in support of it. I think the most serious thing in the present day is this so-called system of osteopathy. We might meet here as the Kentucky State Medical Society year in and year out and resolute until we are tired of resolving, but when action is to be taken we must look to the State Board of Health, which is a part of the government of our State. And I think it would be wise for us, not only as a Society, but as individuals, to uphold the hands of this Board. They can do nothing without our support. We know here in Louisville only a few years ago on almost every porch there was a banner, "Dr. So-and-So, Specialist," but the law of 1894 rid us of many of them. And you all know these star robbers who visit your towns and herald their great cures, which we as medical men know are lies. But this question of osteopathy confronts us. I was in the legislature when the bill was up to regulate some of these things, and you have no idea of the influence that was brought to break down our law and break down the State Board. We have a law that is a compromise, in that it compels these men to come before us and undergo an examination. There was only one individual that came before the Board last year, and that was a lady, and if I had been a member of the Board I would have voted for her, because she was a brave individual to come before that body. When the canvassers of

* Meeting held in Louisville May 17, 18, and 19, 1899.

the legislature come to us we can make the candidates say how they stand on the medical law. That is something that is done by the saloon keepers and by the lawyers, and why can not we do it?

Dr. Dudley S. Reynolds, Louisville: Before we undertake the great difficulty of enacting laws for the people we should stop prescribing secret compounds and proprietary nostrums and giving certificates of their efficacy. This morning a lady came in and asked whether I would recommend her to purchase So-and-So's codliver oil for her child. I told her it was a substance the composition of which I did not know. She said it was recommended by two medical men of this city, whose certificates she presented in print.

Discussion of "The Normal Salt Solutions in Surgery," by Dr. J. B. Bullitt, Louisville.

Dr. August Schachner, Louisville: I would like to call attention first to the preparation of the normal salt solution. If the normal salt solution is prepared and sterilized as it should be, sterilized in the fractional way, the first day ten or fifteen minutes, the second day five minutes, and the third day also five minutes, we will destroy all germs and the spores of germs. Whether the water is distilled or ordinary water that is free from mineral matter, or containing mineral matter, we will find that the water often contains flocculi. When an intravenous injection is made there is some danger from emboli from these fine flocculi. In support of the fact that this is not an imaginary danger, I would like to record a case reported some years ago at Johns Hopkins Hospital. A wife of a physician was operated on there for extra-uterine pregnancy. Hemorrhage followed, and it became necessary to make an intravenous injection of salt solution. The precaution to remove the fine flocculi was overlooked, and as a result there was embolism of the vessels of the arm, which resulted in gangrene of the arm, and although the life of the patient was saved, she lost her arm. This is a very practical point to which I would like to call the Society's attention, and another practical point is the manner of making the injections. It seems like a very simple little operation, but there is quite a trick about it. For instance, whenever it becomes necessary to make an intravenous injection for hemorrhage, we find that the veins do not come up as they do under ordinary circumstances. We find the veins are largely empty from the loss of blood, and as the result of this it is quite difficult to expose a vein. Now, if in making an intravenous injection you will

allow the hot salt solution to flow up against the lips of the vein, it will be opened, and you will at the same time exclude the possibility of the entrance of air.

Dr. John A. Lewis, Georgetown: The portion of the paper read interested me very much, and I would like to have heard the entire paper. Yesterday I suggested the use of the salt solution in certain non-surgical diseases. In the discussion of cerebro-spinal meningitis you will recall I said that as the treatment, as acknowledged by all, is a failure, it has occurred to me that possibly in these desperate cases the withdrawal of perhaps a pint of fluid, followed immediately by the introduction of a pint of the normal salt solution, might give a better result. I have not heard the suggestion, but I would commend it to the profession as worth a trial. Such a procedure would dilute or attenuate the poison, and thus lessen the virulence of the disease, and at the same time it would increase elimination. The tendency is toward asthenia, but by introducing the saline solution you overcome this.

Dr. Arthur McCormack, Bowling Green: Everybody must have been impressed with the paper. I would like to refer to the Doctor's remark that the salt solution must be sterilized from three to five days before the hemorrhage occurs. If we applied that, most of us would either not do the operation or not have the hemorrhage.

Dr. J. H. Letcher, Henderson: I was sorry not to hear the Doctor's paper, for it was the one paper on the programme that I think of most value. I have had some experience with the salt solution, and I think the time has come when we, as country practitioners, must feel it important to be prepared to use this preparation. I think we should prepare our saline solution beforehand—at least in concentrated form—then we could use boiled water at the time for the purpose of dilution, and I do not think there is any danger at all in the use of it. I rather prefer the intracellular use of the salt solution, because when you are pressed by other work your nurse can then use it for you. In railroad surgery I have seen the very best results follow its use. I regret exceedingly that I did not hear the Doctor's entire paper, and I trust that in closing the discussion he will be permitted to give the cardinal points in his paper. I want to add my testimony to the excellent results that may be obtained from the use of the salt solution. If you do not care to take time to find a vein you will get good results from throwing the solution under the skin. You will then save the

time that otherwise would be occupied in searching for a vein, for it does take a little time to make the intravenous injection; and then I agree that you should not use the solution once, but again and again—not only for a few hours, but if necessary for a few days. When any thing depletes the system, as in the bowel troubles of children, it is invaluable. I believe the time has come when we should have these things in our offices and be prepared to use them.

A Member: Any thing that is worth doing at all is worth doing well, but in a case of emergency we may not always have the normal salt solution at hand. We do not rely upon the virtue of the chloride of sodium, but we want fluid in cases of collapse, which occur, not from the absence of certain medicinal agents which might be present in the salt solution, but from the absence of water. Thus under certain circumstances we can conceive that it might be advisable to introduce water without the addition of salt.

Dr. W. C. Dugan, Louisville: I am sorry the gentlemen put down to discuss the paper are not here, because this is one of the most important life-saving methods I know of. I am satisfied that I have saved lives by this procedure. The injection into the submammary space is perhaps the best method. Lift up the mammary gland, and you can inject beneath it quite a quantity of the normal salt solution. In cases of emergency I prefer injecting into a vein. I have not found any difficulty in finding the veins. The median cephalic is easily located. If you make an incision in the proper direction you will expose the vein without any difficulty at all. You should lift up the vein entirely; then with the needle full, or with an ordinary pipette, which I have used in some cases, introduced well into the vein, you may use such a quantity of the normal salt solution as will have a direct effect on the tension and volume of the pulse. It is very effective indeed. In regard to the quantity, the essayist made a good point; that is, not to use too much at a time, but to repeat the operation if necessary. In a case of extra-uterine pregnancy, with a pulse of 160 to 180, I injected a quantity into the submammary tissue at various times for two or three days, and finally the patient made an uninterrupted recovery.

Dr. W. B. Gossett, Louisville: A great deal can be done to save a great many patients, especially where you have a severe hemorrhage. You can then use the hot douche, say, just after a post-partum hemorrhage, when the patient has lost considerable blood. Take, say, a

teaspoonful of common salt to a pint of water, and introduce a gallon or two into the vagina and rectum, and a great deal of the fluid will be absorbed, especially from the rectum. This is of great value in the hemorrhage following placenta previa, where we lose a great many patients from hemorrhage. When the child has been delivered in the manual way, often we have severe hemorrhage. For this hemorrhage we may use from half a gallon to a gallon, or even three gallons of a salt solution. In that way you will save a great many cases that could not be reached in any other way.

Dr. C. L. Bonifield, Cincinnati: I want to thank the Society first for the privilege of the floor, and then add my testimony to the value of the saline solution. I never, under any circumstances, fail to speak in favor of the salt solution when I have an opportunity, because I regard it as one of the greatest life-saving procedures of recent years. I want to compliment Dr. Bullitt upon his paper, which I think excellent in every way. The gentlemen have learned that any thing worth doing is worth doing well, but in these cases if we take too much pains and time the patient will die while we are doing it. While in hospitals we can have the saline solution ready for use days before the time for the operation, yet in country practice and in private hospitals this is often not done. Then the physician may be sure that he will not kill his patient by injecting ordinary boiled water containing the necessary amount of salt. In reference to the relative merits of the different methods, the subcutaneous injection is much easier than the intravenous injection, but it does not give as prompt effect by any manner of means. But if the patient is in collapse and the physician does not feel that he can readily find the veins, he may first introduce several ounces of the salt solution under the skin and then proceed to open the vein. It has been my experience that the vein is comparatively easy to find. Of course it is necessary to obstruct the vessel so it will swell out. You do not need any complicated instruments, but grasp the vein and introduce the medicine dropper attached to a fountain syringe, and let the water run in under moderate pressure. I do not think it is likely you will introduce too much fluid if the pressure is not great. I often introduce as much as two quarts of water when the shock is profound. It is seldom necessary to reopen a vein unless further hemorrhage takes place. The further effect of salt solution may be gotten by its introduction into the rectum, which absorbs the water very readily, but does not give the effect of intravenous injections.

So by all means the best method of introducing the saline solution is through the vein, and I hope every doctor in the State of Kentucky and in the United States will feel himself competent to do this, and do it whenever occasion requires.

Dr. R. C. McChord, Lebanon: The case has been recorded that the mistake of not putting the salt into an injection into a dog proved fatal. Of course that is an isolated case, but it is a case that should be borne in mind. I am glad this subject has elicited so much discussion, and I am only sorry the Doctor did not get to finish his paper. I hope that in the conclusion of the discussion he will go more into detail and give us the points that were contained in the latter part of his paper. A valuable point was made by the gentleman from Ohio, that is, that when we have considerable hemorrhage an injection may first be made into the cellular tissue, and then the vein can be opened subsequently.

Dr. Taylor, Greensboro: Patients suffering from acute septicemia or Bright's disease bear operations very well if preceded by the salt infusion. They then stand the shock much better and recover much better.

Dr. Edward Speidel, Louisville: I would suggest the use of an apparatus that can be carried in any satchel. It consists simply of a four ounce glass funnel, two feet of rubber tubing, and an aspirator needle, which is pushed into the tube. This can be sterilized at home, wrapped in a clean towel, and packed in any satchel. The manner of using it is to pour the fluid into the funnel, and while the fluid is flowing, introduce the needle into the vein or cellular tissue. The text-books recommend the space between the scapulæ, I think, as the proper place. I would suggest the right and left hypochondriac regions of the abdomen as better. You can not always secure absolute cleanliness, and in case of abscess between the scapulæ or on the thigh, there is considerable trouble.

Dr. F. J. Yager, Campbellsburg: I want to make a few plain, simple statements. I like this theory of action. There is no impediment or obstruction in its way. There are enough avenues in the human system through which to introduce this material, which requires no question as to its general use. I believe there are enough plain statements made as to its work and general practicability for us not to question that any further. The gentleman who introduced this subject has made it exceedingly plain. We only need to prosecute its use. I have never

had a favorable opinion of any such thing acting upon the human system, but this is an innocent drug, and no danger can come from its use. These gentlemen have made it perfectly plain and sensible and practicable. Now we have only to study and practice its use, and the results coming from it will be of almost incalculable benefit to the human family. The gentlemen who have made such strides in its use I hope will prescribe it and even further simplify it if possible.

Dr. B. F. Parrish, Midway: Speaking of an apparatus for use in this injection, I know of no reason for carrying a special apparatus. Every man has a fountain syringe and a hypodermic needle, which are all he wants. He can cut down to a vein, introduce the needle attached to his syringe, and the fluid will enter. It is not necessary to use a special apparatus.

Dr. James B. Bullitt, Louisville: I shall only attempt now to take up a few points in this discussion. First, in reference to whether simple water will suffice. I think it will not. There are several things we do know that indicate that simple water, especially distilled water, acts as a poison when put into the circulation. Reilly, in a recent article in the Medical Record, states that normal salt solution is absolutely non-toxic; that ordinary water is almost harmless, but that distilled water is very toxic when injected into the blood. Ordinary water is less toxic than distilled water, I take it, because it contains always various saline substances which possibly take the place of the chloride of sodium, for chloride of sodium, you will all remember, is not the only salt found in the blood. So I do not think it is safe to depend upon the injection of simple water. Then as to the manner of preparing the solution and the apparatus; both are very simple. Just as we become aware of the simplicity of this procedure, just so will it come into general use. I am satisfied one of the most important things that not only the surgeon but the physician can come to know is the many uses to which the saline infusion can be adapted. I agree with Dr. McCormack that if we knew beforehand that we would have a hemorrhage, we probably would not have it, but I think he must be an Irishman, or he would not have thought of that remark. The fractional sterilization may be practiced in hospitals, but that is not essential for our purpose. Boiled water, boiled from five to fifteen minutes, is sterile. But in hospitals it is often convenient to prepare it in twice the 0.6 per cent strength and store it away. When you want to use it take half the amount from the salt water bottle and half from the

water bottle, and your solution is ready for use. In country practice this is not practicable. But I believe the apparatus should always be sterilized before making the infusion. Any thing used in making the infusion should be boiled, and any thing boiled from five to fifteen minutes is clean enough for all practical purposes. I would call the attention of the gentlemen to the fact that the domestic teapot is often one of the best things that can be used. When a vessel or pan is brought to you, you don't know whether it is sterile. The people say it is clean, but in the surgical sense of the word it is not clean. But the old teapot is almost always sterile. It may have a few black flakes on the side from oxidation, but by straining you can be sure that you will get a fluid that is sterile. In making the intra-uterine injections in obstetrical practice, I often prefer to use a teapot. The funnel and tube and needle can all be put on the fire and boiled.

[TO BE CONTINUED.]

Abstracts and Selections.

SPECIFIC TREATMENT FOR TUBERCULOSIS.—The New York County Medical Society, at its recent meeting, reported in our columns this week, discussed the subject of adjuvants or auxiliaries to the climatic treatment of pulmonary consumption. It is evident that specialists in the treatment of this dread disease are still hopeful that some specific pharmacal or biologic remedy for the affection will certainly be discovered. The hope is shared very generally, by the younger specialists at least, in Europe. The present writer remembers distinctly with what assurance Professor Lesser, of Berlin, about a year ago, in a clinic on lupus vulgaris, spoke of his confident expectation that a specific for tuberculosis quite as powerful against the lesions of that disease as is mercury against syphilitic processes exists and only awaits discovery.

The prospect is an alluring one, and certain recent tendencies in microbiology rather confirm the hope of its fulfillment. Syphilis is now very generally considered a microbic disease, and it is conceded that at least the major part of the action of mercury in the disease is due to its antiparasitic or bactericidal character. Against the syphilitic germ mercury has a selective action, and this specific growth-inhibiting or prohibiting action is not without analogies in modern microbiology. Nitrate of silver has a corresponding action upon cultures of *aspergillus*. This fungus will not grow if to the culture-medium is added scarcely more than the minutest trace of the silver-salt. A larger proportion than is necessary to produce this inhibition of even such strong drugs as the mercurial preparations are

readily dissolved in the serum and tissue juices of the human organism without disturbing the economy, and are actually thus held in solution during the giving of a mercurial course of medication.

On the other hand, there are those who claim that the action of mercury in syphilis is not specific because bactericidal but because it is a tissue stimulant of the first rank. From their standpoint it is questionable whether we should look with any confidence to the prospect of a specific medicament. Even during the last twenty-five years, while therapeutic observations have supposedly been gathered with more care and judgment than ever before in medical history, a series of new remedies for phthisis have been triumphantly introduced, quite generally used for a time, and then given up or allowed to sink into innocuous desuetude. Even the remedy at present so universally prescribed in America, creosote, has lost most of its popularity abroad. It is used very little in the foreign hospitals and clinics. Some time ago Eichorst, of Zurich, after a serious painstaking trial of it in his wards for more than two years, said that he could not persuade himself that he had ever seen any advantage accrue from its administration. In the last edition of his text-book, 1897, he recommends only ordinary tonic and stimulant treatment for tuberculosis.

The maxim, *primum non nocere*—be sure to do no harm—obtains very forcibly in the use of new drugs, and the slightest sign that a remedy is interfering with general nutrition by disturbing the appetite or the digestion, as is not infrequently the case with creosote, must be the signal for its withdrawal. Some of the newer remedies mentioned may prove on further trial to have specific virtues; meantime one thing is sure, that so long as they continue to bear the stamp of novelty the strong psychic element that enters into all novel therapy of tuberculosis will cause practically all cases primarily to improve under their administration. Due allowances must be made for the suggestive element. The local treatment of lesions, whether tubercular or not, of the nasopharynx and larynx, the endeavor to keep the digestive tract at its acme of healthfulness for nutritional purposes, respiratory exercises, and hydrotherapy, all these judiciously employed mollify the annoying symptoms, increase constitutional vigor, give tone to the general system, and encourage the hopefulness of the patient.—*Medical News.*

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THE RESTRICTION OF SYPHILIS.

On the 4th of September next an International Medical Conference will be held at Brussels. The conference is called by the Belgian Government, and its delegates will comprise the living genito-urinary authorities of the world.

The object of the conference is a full scientific discussion of the syphilis question in its etiological, hygienic, therapeutic, and prophylactic features, with a view to its bearing upon the great social problems of the day.

The present alarming prevalence of syphilis and its entrance into places hitherto unknown are considerations which, in the opinion of the Belgian Government, demand a thorough rediscussion of the subject by the representative syphilologists of the world. A discussion of the most effective means of repressing syphilis must mean incidentally the regulation of prostitution.

Much has already been said and written upon this dark subject, but no measures so far suggested and put in operation have proved even practicable, much less effective.

After alcohol, syphilis is the greatest scourge of mankind, and it is high time that the world should be awakened and brought to see the monster in all its magnitude, ugliness, and horror.

Through the recommendation of the Hon. John Hay, Secretary of State, the American delegation will consist of the following eminent genito-urinary surgeons and physicians: I. N. Bloom, of Kentucky, Chairman; R. W. Taylor, Sigmund Lustgarten, and L. Duncan Bulkley, of New York; James C. White (Harvard), of Massachusetts; J. William White, of Pennsylvania; W. A. Hardaway and John P. Bryson, of Missouri; J. Nevins Hyde and G. Frank Lydston, of Illinois; and George Chismore, of California.

MEDICAL SCHOOLS AND MEDICAL STUDENTS.

Within a little while medical students throughout the entire country will take their departure for the colleges of their individual choice, and because of the fact that there is such a great difference in the equipment and relative facilities of the various medical colleges, and because of the further fact that State Boards of Health and State Examining Boards are becoming so rigid in their requirements, a few words of suggestion in regard to what should determine a student in his selection of a college may not be inopportune, for it is through the medical press that the profession and those entering the profession look for protection.

Nearly every State has now adopted requirements that will not permit any one to practice medicine, or to be examined to practice medicine, who has not graduated from a school that requires attendance upon four full and regular courses of lectures, and the few States that have not adopted such ruling will certainly do so before students now beginning their collegiate course will be able to procure a diploma. Many of the States require every applicant for a certificate to practice medicine to be examined upon all the branches taught in the colleges, and will not examine any student who has not graduated from a school that does not require attendance upon four courses of lectures.

Only recently a great number of graduates of last session who live in Kentucky were humiliated by having their diplomas refused recognition when presented to the Secretary of the State Board of Health in a petition for a certificate to practice medicine. Under the recent rulings of the Board no student with a diploma from a school that graduates any man within less than four years of attendance upon lectures will be permitted to be even examined for a certificate by the Kentucky

Board. Any student who graduates after attendance upon three courses of lectures, or from a school that requires attendance upon but three courses of lectures, if he has any aspiration, will be humiliated because he can now be permitted to practice in so few States, and because he will be branded through his future career as a man who advanced himself through what is vulgarly known as "Cheap John" methods in procuring a medical education, and this will be used against him effectually by his competitors wherever he may locate.

It therefore behooves the aspiring medical student, and one who wishes to avoid trouble and humiliation, to select a school that not only requires attendance upon four courses of lectures, but also of long standing, with a large alumni, and with a reputation above reproach, for most State Boards of Health will not give recognition to a school until it has existed long enough to demonstrate its capacity for teaching and has procured the facilities recognized as necessary for a college in good standing.

The old method of didactic teaching by lectures has been made subsidiary to clinical, laboratory, and recitation teaching, and a school to be in good standing in the future must have ample and complete hospital facilities, and fully equipped rooms for the teaching of clinical surgery, medicine, gynecology, obstetrics, diseases of children, ophthalmology, etc. It must also be provided with large and perfectly appointed laboratories wherein are to be found all reagents, apparatus, and instruments needed in the demonstration of histology, bacteriology, pathology, chemistry, physiological chemistry, materia medica, pharmacology, physiology, anatomy, surgery, etc. Schools without these equipments will not meet the demands of the future.

Having called attention to these facts, we have performed what we conceive to be a sacred duty, and we hope that the profession and the medical student will appreciate the purity of the motive that prompts us in giving advice that we believe will be, if observed, of incalculable value to those young men who are now preparing to enter the medical profession.

STAINING ULCERS.

The value of staining ulcers can not be overestimated, and especially is this so in ulcerations of the cornea and mucous membranes. Not only does the staining show the outline, but it shows the condition from day to day. In corneal ulcerations it is exceedingly difficult

oftentimes to tell the exact area and outline. The same is true of mucous membranes in the early and superficial stages. One grain of Merck's methyl blue to the ounce of distilled water makes a stainer for which there is no equal. A single drop of this put into an eye with open ulcer in the cornea gives the perfect outline at once, and makes it so clear that there can be no mistake made in making the application of carbolic acid to the open surface, or for that matter any other caustic, but this is the safest and best. The application of the acid should be made by using a metallic probe. The bulbous end of an ordinary dressing probe is dipped into the acid and an excess removed by forcibly shaking the probe as you would a thermometer in throwing the mercury down. A bland oil should be dropped into the eye immediately after the acid has been applied, so as to confine the action of the acid to the desired space.

CLEAN OBSTETRICS.

The obstetrician of all men should be clean. His responsibilities are great, and no ordinary care in preparation to deliver a woman will suffice.

To the writer this particular crime of negligence is one of the most serious that a doctor can be guilty of. He is the trusted of all men on such occasions. The husband, the family friends, and lastly and most particularly the woman who is about to become a mother, are absolutely dependent upon the accoucheur for her general welfare in this part of the maternal act, to say nothing of the possibility of losing her life.

No general surgeon ought to attempt to deliver a woman, and particularly that class of surgeons who do not know how to be clean. The doctor that is attending any of the acute infectious diseases should refrain from obstetrical work while in attendance upon such cases, unless his clothes have been changed and he has been thoroughly disinfected. Puerperal sepsis is the result of infection due to carelessness in the majority of instances on the part of the doctor who delivers the woman or of the nurse in attendance. He does not have his patient prepared as she should be before and after delivery. He does not cleanse his hands as often and as thoroughly as they should be cleansed. He leaves portions of the afterbirth and blood-clots, and does not give the woman the careful attention which is her due.

There is too much hurry, and too much of the "let nature do the work" about many practitioners. The laity are being educated in these matters, and if careless doctors are punished for their negligence they need not be surprised.

Notes and Queries.

DR. W. P. MCINTOSH, who has been stationed at the United States Marine Hospital in this city for the past three years, has been transferred to Mobile, where he will have charge of the hospital there. Dr. John McMullens, who has been stationed at Portland, Maine, succeeds Dr. McIntosh.

MEDICAL EDUCATION IN KENTUCKY.—The State Board of Health of Kentucky gives notice to all concerned that it will hereafter refuse to recognize as a basis for certificates to practice medicine diplomas from any medical college which does not, in good faith, comply with the requirements of the American Medical College Association, the American Institute of Homeopathy, and the American Eclectic Medical College Association, respectively, both as to preliminary education and four years' course of study. This means that no school that graduates three-year students will be recognized in this State hereafter.

The board provided an examination for three-year graduates of the present year, as many of the students had attended such schools in ignorance of its advanced requirements, but found this course unsatisfactory, a large per cent of the examinations indicating incomplete preliminary education as well as imperfect medical training. This standard for the State of Kentucky was made and promulgated in 1891, to take effect this year, but is again published that schools patronized by Kentucky students, and future graduates expecting to practice here, may fully understand our requirements.

Very respectfully,

J. N. McCORMACK,
Secretary State Board of Health.

BOWLING GREEN, KY., August 1, 1899.

A LARGE GIFT TO THE WOMAN'S HOSPITAL.—Russell Sage has given \$50,000 towards a new building for the Woman's Hospital, of which Mrs. Sage is vice-president. The estimated cost of the building is \$400,000, and it is to be erected on the present site of the institution.—*Boston Medical and Surgical Journal.*

Special Notices.

SANMETTO IN CYSTIC AND URETHRAL IRRITATION AND INFLAMMATION, AND IN CHRONIC PROSTATIC HYPERTROPHY AND ATROPHY.—I have for years prescribed, as well as taken myself, Sanmetto, and have found it almost universally satisfactory in cystic and urethral irritation and inflammation. I have also used it with marked results in chronic prostatic hypertrophy, and even in atrophy of the prostate I have found it useful.

W. A. FORSTER, M. D.

Kansas City, Mo.

W. C. FREDERICK, M. D., Lono, Ark., says: I have used S. H. Kennedy's Extract of *Pinus Canadensis* (Dark), one to three of water, in sore throat from cold with splendid results, and have now under treatment a little boy, three years old, suffering from strumous diathesis, who had been afflicted over a year with otorrhea. Have been using as an injection two drachms of S. H. Kennedy's Extract of *Pinus Canadensis* to four drachms of water, three to five drops two or three times a day, the ear previously cleansed with castile soap. The little fellow commenced to improve from the very start, and is rapidly improving daily; the discharge has almost ceased. He has been on this treatment for about two weeks.

TREATMENT OF DYSENTERY.—Dr. Christopher C. Cronkhite (Medical Review, May 20, 1899) gives an interesting account of an epidemic of dysentery in which he had an opportunity of treating twenty-three cases. Owing to the bad hygienic conditions prevailing, it was found very difficult to successfully combat the disease. The treatment consisted chiefly in the administration of tannigen in doses of five to ten grams every three or four hours, according to the age, in connection with the necessary dietetic regulations. In some cases its use was preceded by small doses of calomel, given for the purpose of cleansing the alimentary tract. Under this treatment the fatality in twenty-three cases was only two, and these, the author believes, would have recovered with careful and intelligent nursing. On the ground of two years' observation, he states that in diarrhea tannigen is his first and last remedy, that it will cure ninety-nine of every one hundred cases, and that the physician can use it with absolute confidence in its powerful curative properties in dysentery and diarrhea.

"VIN MARIANI" is essentially the brain and nerve tonic of those who have talent and genius. These it is who compose the great army of intellectual workers, and the ravages made upon their nervous systems by the demands made upon them are at times truly appalling. This damage and consequent drain yield to nothing more quickly than to "Vin Mariani." The most noted European physicians, litterateurs, musicians, singers, artists, and diplomats have sent the most flattering letters to M. Mariani extolling his product. Not only these, but crowned heads as well have been mentally invigorated and rejuvenated by "Vin Mariani," and never tire of speaking words in its praise. It must be acknowledged that unsolicited testimonials, couched in such glowing terms, from such sources, are the best evidence possible that can be offered for the merits of the preparation. When "Vin Mariani" becomes as well known in this country as it is in Europe, it will be adopted as one of the indispensable remedies in the household.—*The St. Louis Medical and Surgical Journal*, May, 1899.

AN OPEN DOOR POLICY IN URIC ACID DIATHESIS.—It is probably not too much to say that the pathological condition which is described as uric acid diathesis is the most prolific parent of morbid disorders to which the human frame is subject. Uric acid and its allied toxines have been very aptly compared to the octopus, whose deadly tentacles ramify throughout the economy, and whose ravages are revealed by many

distressing manifestations. Given the cause and effect, the treatment is obvious—that of removing the cause. To accomplish this purpose many remedies, both natural and artificial, have been offered to the profession, but none respond with more certainty and celerity than Alkalithia, the *modus operandi* of which is to maintain the alkaline integrity of the blood and exert a specific solvent power upon the products of imperfect nitrogenous metabolism known as uric acid and allied products. By favoring diuresis, Alkalithia further aids in the expulsion of these disorganizing toxins. The value of a remedy designed to meet the above conditions should not only be studied with direct reference to its antilithic and eliminant properties, but also to its own ultimate disposal. If an account could be kept in a therapeutic ledger many a remedy would be charged on the debit side of its account for such disturbance as it may occasion after ingestion. The human economy is never more willing to welcome remedial aid than it is to speed its parting after it has served its purpose. Its ingress and egress should be accomplished with equal facility. The salicylates may be of service as solvents of uric acid, but the faulty elimination of these agents has been the source of much physiological sorrow. Alkalithia is carried off by the tide it causes to flow, and its advocates never become its apologists.

JOSEPH WESLEY MALONE, M. D., Blythedale, Pa., says: I am so well pleased with Celerina that I can not refrain from citing several cases of interest. I prescribe it very frequently, and have never had it to fail yet. I used it in a case of chorea. The patient was a little girl, ten years old, suffering from an acute attack. The case had been given up by two physicians, and was a very bad one. The usual remedies, phosphorus, arsenic, etc., had been used and had no great effect. I advised the attending physician, an old practitioner, and a good one, too, to try Celerina. He did not take much to the idea, but after urging him he consented, and the first dose gave relief. From that time the child got better, and in about four weeks was cured. It acted like a charm, and the old physician, who had never used it, was so well pleased that I am sure he will try it again. I have prescribed it in nervous prostration, and have yet to find it to fail. It is pleasant to take, and produces no nauseating effects, as other remedies do when used for some time. I frequently prescribe it with Aletris Cordial, and it also goes well with Peacock's Bromides. I shall continue to prescribe it, and shall watch its merits closely.

THE STORY OF A NOTABLE PICTURE.—One of the most important and admired pictures displayed in recent years at the National Academy Exhibitions is "The Country Doctor," by Mr. W. Granville Smith.

"The Country Doctor" is a vivid portrayal of a familiar episode—a furious winter night tempest, a long struggle through drift and storm at duty's call, an exhausted old doctor struggling wearily forward, a fatigued horse shrinking in the blinding snow-blasts, an anxious mother eagerly waiting the longed-for relief. From the porch of her humble country home she peers eagerly out into the storm. The lantern she holds above her head cuts a feeble path of light through the gloom, along which the doctor plows his way to shelter.

This strong and beautiful work, presenting a phase of a doctor's life, has been purchased by us at the National Academy for \$1,000. It is our purpose to exhibit the original at the various assemblies of physicians held from time to time throughout the country, and also to reproduce the picture in exact fac-simile by lithography, of a size suitable for framing. The subject is of uncommon interest, especially to physicians, a fit common-piece to the famous painting by Luke Fildes entitled "The Doctor," which we reproduced and presented to physicians some time ago. We shall be pleased to send a copy to any member of the medical profession on receipt of 10 cents to pay mailing expenses.

It is now in press, and will be ready for distribution in the late summer.

THE ARLINGTON CHEMICAL CO.,
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THE AMERICAN PRACTITIONER AND NEWS.

"*NEC TENUI PENNĀ.*"

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE CLOSURE OF THE ABDOMINAL INCISION AFTER LAPAROTOMY.*

BY A. T. M'CORMACK, M. D.

In this period of recent surgical development, when safer and simpler operations per vaginam are rapidly displacing most abdominal operations on women, it may strike the Society, at first glance, that a study of the methods of closure of the abdominal wound after laparotomy would be of little value. However little one may realize it after listening to the average gynecologist, there are still many operations which are not in their purview, and the general surgeon still has numerous opportunities for incisions in the abdominal wall and their subsequent suture. For this reason I have had very little hesitation in selecting my topic, and while I may add little that is new on this important subject, I hope to present a practical plan, and show its simplicity and effectiveness.

Let us first consider the structures that enter into the abdominal wall. These are skin, subcutaneous fat, muscular tissue one or more layers of fascia, subperitoneal tissue, and peritoneum. The ideal aim of the surgeon in closing an incision through these tissues is to restore their normal relations. As this ideal can only be reached approximately, I shall take up each of the structures separately and consider how the continuity of each may be most easily and most completely restored.

* Read before the Kentucky State Medical Society, May, 1899.

In every aseptic incision through the peritoneum its retracted edges should be brought into immediate apposition by a continuous suture of fine catgut. This serves a twofold purpose, viz: the prevention of infection of the cavity, if, as unfortunately will happen occasionally, some outer portion of the wound should become septic, and the prevention of infection of the line of the incision from within. It may be denied that the latter can occur without a septic peritonitis, but every observer who has seen through-and-through stitches used to close incisions after laparotomy must have seen such cases. It seems to occur after this fashion: A small colony of pathogenic germs that would be destroyed by phagocytes from a normal peritoneum settles and develops in the gap which will be left between any two stitches put in by the through-and-through method. Such a colony develops in the non-resisting subperitoneal tissues under most favorable circumstances, and rapidly invades other structures, within and without, whose resistance has been lessened by the traumatism.

Muscular tissue is only resistant in the line of direction of its fibers. An incision or a separation along this line demands no suture usually, as the suturing of adjacent structures, aided by the functional activity of the muscle itself, will bring the edges of the divided muscle together. If the incision has been made elsewhere than in the median line, and muscles have been divided transversely, the ends should be brought together by numerous buried interrupted sutures of chromicized catgut or kangaroo tendon. Wherever it is possible McBurney's simple plan of dividing the fibers of the different muscles, instead of incising them, should be adopted. While this plan was devised for appendectomies, it is applicable to almost every celiotomy where the incision is not in the median line.

Then, if the muscular tissue is resistant in only one axis, what abdominal wall structure supplies its place in the other axis and prevents hernia between the fibers of the muscles? It must be evident that the fascia, composed of dense, interlacing strands of connective tissue, whose elasticity is slight, must be our main dependence in the restoration of the belly wall. If after operation the apposition of the fascial edges is so accurate that there can be no beginning of a pouting of abdominal structures outward, there can be no hernia. Whether absorbable or non-absorbable materials should be used for these sutures is a mooted question, and is probably immaterial, good authorities adopting each plan. Whatever material is used, whether silkworm gut,

silver wire or catgut, the interrupted stitches should always be placed close together. I have preferred Harris' procedure and used chromicized catgut or kangaroo tendon, because either of these is ultimately completely absorbed, and I introduce four sutures to each inch of incision.

Unless pressed for time a running suture of fine catgut, as suggested by Kelly, should bring the edges of the subcutaneous fat together. This is more important if this layer is very thick. Such a suture takes but little time and obliterates a space which frequently, in the old procedure, became filled with a clot which subsequently broke down from surface infection.

The skin is so elastic that it is of little use in the prevention of hernia, but its careful suturing is of the utmost importance, not only from the prevention of infection but in order to make a slightly scar and to not too long delay convalescence. One of the most important practical lessons of the surgical bacteriologist is that the staphylococcus epidermidis albus is rarely, if ever, entirely removed from the skin by whatever method of sterilization has been adopted. Have we any method of bringing skin surfaces in such perfect apposition that the danger of infection from pus-forming bacteria in the skin is minimized? Marcy or Halstead or both have answered the question with their subcuticular stitch. This is simple, easy to apply after a little practice on the cadaver, takes but little time, and, if catgut be used, there are no stitches to remove. The scar left is a slight linear one, and after a few years is practically obliterated.

To summarize, I would say that the most efficient method of repair of the abdominal incision would consist of the following distinct steps: (1) A continuous peritoneal suture of fine catgut, (2) an interrupted suture of chromicized catgut for the fascia with four sutures to the inch, (3) a running suture of catgut for the subcutaneous fat, and (4) a subcuticular subcutaneous stitch of catgut for the skin.

Of the necessity for this or some similar method of tier suture there can hardly be a question. The time should have long since passed when any surgeon would use the old through-and-through suture unless his patient be in such danger of collapse that haste was a necessity and hernia and infection a secondary matter. I have heard even noted surgeons, after using the old method for years, say that they themselves had never had a hernia following one of their laparotomies, nor a stitch-hole abscess, nor a serious adhesion, nor a contracture of

gut. Such statements can only mean that some noted surgeons do not keep their patients' history after the operation and immediate convalescence are passed; but such accidents have happened within the experience of every general practitioner, and the surgical history of nearly every county in this or any other State would be incomplete without a record of one or more such post-operative accidents, the result in almost every one of them of the use of the through-and-through suture.

BOWLING GREEN, KY.

THE USE OF CHLOROFORM IN LABOR.*

BY WALKER BOURNE GOSSETT, M. D.

Instructor in Obstetrics, Gynecology, and Abdominal Surgery, Louisville Medical College.

"Among primitive people, still natural in their habits, and living under conditions which favor the healthy development of their physical organization, labor may be characterized as short and easy, accompanied by few accidents and followed by little or no prostration."

Obstetricians and chloroform would never be needed if women of to-day had as little pain during childbirth as Wenonah, in Longfellow's song of Hiawatha:

There among the ferns and mosses,
There among the prairie lilies,
On the Muskoday, the meadow,
In the moonlight and the starlight,
Fair Nokomis bore a daughter.

The civilized woman of to-day is far from being in a physiological condition. Higher development renders her more susceptible to bodily suffering.

"The pain of childbirth is like unto the torments of hell." Many physicians say it is a natural pain, and nothing should be given, but let nature take its course, and let woman suffer. If the Almighty has placed an agent on this earth to assist woman to bear this pain, or lessen the sensibility of the pain without materially decreasing the force of power of the uterus and increasing the danger to mother or child, it is our business as physicians to find what this agent is and apply the same.

Chloroform is our agent, and, if given correctly, it will lessen the sensibility of the pain, having no marked effect on the force of the power of the uterus, and not increasing the danger to mother or child.

* Read before the Kentucky State Medical Society, May, 1899.

Early in 1847 the illustrious Sir James Y. Simpson proved that inhalation of sulphuric ether could be safely and successfully used for the relief of pain in childbirth, and later in the year he established the same fact as to the inhalation of chloroform. Obstetric anesthesia soon found a few in Great Britain and on the Continent to advocate and practice it. In the United States Dr. N. C. Keep, of Boston, was the first American physician to administer an anesthetic in labor. Dr. Walter Channing, a distinguished American physician, advocated the practice. His treatise on "Etherization in Childbirth" was published in 1848.

The late Prof. Henry Miller, of this city, the author of "Miller's Text-book of Obstetrics," gave chloroform to a woman in labor on the 13th of March, 1848. This was the first time chloroform was thus used west of the Allegheny Mountains. Dr. Miller remained faithful to anesthesia in labor the rest of his honored life; and he strongly advocated the practice, and with his well-known ability answered the arguments adduced against it. Miller and Channing are the two names in this country that shine with the most luster in connection with the early advocacy of obstetric anesthesia.

On the other hand, three of the most eminent obstetric teachers, Meigs, Hodge, and Bedford, strongly opposed the use of anesthetics in normal labor, and their influence was more powerful than that of its advocates. The controversy here was but the reflex of that which was occurring in Great Britain. Simpson asserted that it was only a question of time as to the general adoption of anesthesia in parturition, and that time has come.

On the other hand, Dr. Ashwell and Dr. Tyler Smith were the most prominent London obstetricians opposing the practice, and declared that "unnecessary interference with the providentially arranged process of healthy labor is sure, sooner or later, to be followed by injurious or fatal results," . . . "that chloroform need only be extensively used to insure its entire abandonment," and that it was "a duty to urge every plea against its further use."

We know that brief surgical operations, much less painful than childbirth, are not done without the use of an anesthetic.

Depaul gave some reasonable objections to the use of chloroform in labor, which are the following: First, it may kill the patient; second, the anesthetic sleep deprives her of reason, so that she can not participate in the great act accomplished, and this participation is in almost all

cases necessary; third, the inconveniences and dangers are not compensated by the advantage arising from the diminution or suppression of pain.

In reply to these objections, first, chloroform has been used in natural labor many thousands of times, yet not over half a dozen cases of death are on record where it was administered by a competent medical man.

The following almost completely exempt the danger from chloroform: The horizontal position, the intermittency in its use, the anesthesia not being profound, the influence of uterine contractions; the alternately relaxing and contracting of the uterus reinforces the action of the lungs and heart, and thus asphyxia and syncope are avoided.

In answer to the second objection, it is obstetrical anesthesia and not surgical which is sought. The patient is not unconscious and incapable of voluntary effort.

As to the effect of chloroform on the force of uterine and abdominal contractions, when given correctly, I have never noticed this force materially decreased. The same holds true of the contractions of the uterus after the second or third stages of labor, and chloroform does not predispose to post-partum hemorrhage. Even admitting that the labor is rendered slower, the lessened suffering makes the trial not so severe and exhausting. Also admitting that there may be a liability to post-partum hemorrhage, a proper management of the third stage of labor and the use of ergot-aseptic, hypodermatically given, will almost certainly avert the danger.

The Choice Between Chloroform and Ether. Chloroform is preferred by most men. It is of a pleasanter odor, its action more prompt, and a less quantity of chloroform is required. Chloroform can be used at night without any danger from light or fire; ether can not, as it is inflammable, and at night we certainly have the greater majority of obstetrical cases. By some it is held that relaxation of the uterus and post-partum hemorrhage are much rarer after the use of ether. King prefers ether, and his main reason is this: "Ether is unquestionably safer; and while the advocates of chloroform claim that but very few deaths are on record from its use when administered with unremitting care and by the hands of an educated and experienced physician, yet these conditions can not always be constantly assured. All men are human; the unremitting care will sometimes remit; oversights and diverted attention happen to all, and in obstetric practice,

with its inevitable fatigue, loss of sleep, and anxiety, are more likely to happen than in other fields of professional work. Hence, as a matter of safety, I prefer ether."

And he also says, "Ether is inflammable and hence care is required in using at night," and as "all men are human, the unremitting care will sometimes remit, oversights and diverted attention happen to all," and so might not the ether man blow up his patient, himself, and all in the room? which would be a calamity far worse than the death of only the patient.

Dr. J. C. Reeve, in his contribution to the American System of Obstetrics, "On Anesthetics in Labor," denies that ether is a safer anesthetic than chloroform, and, after a careful study of accidents from chloroform in labor, makes the following statements:

1. But one well-authenticated case of death is on record where the administration was by a medical man, and in that case no autopsy was held.

2. Dangerous symptoms have occurred but a very few times, and that almost always from violation of the rules of proper administration.

3. The danger when chloroform is used only to the extent of mitigation or abolition of the suffering of childbirth is practically nil; when carried to the surgical degree for obstetric operations, the danger is far below what it is in surgery.

4. No proof can be furnished that the parturient woman enjoys a special immunity from the danger of anesthetics, although facts seem to indicate that such exists. Her best safeguard lies in the care and watchfulness of the administrator.

Chloroform is not without danger in other operations, when only two or three inhalations are taken, and sometimes death results from heart-failure. But in labor I think there is no danger of this shock taking place, because the pain of labor is somewhat of a shock to the patient of itself. The heart is physiologically prepared to meet this condition, so that the slight additional shock of chloroform, if there be any, adds little or no gravity to the condition. But if you are afraid of this heart-failure, you may during the first part of the second stage of labor administer hypodermatically sulphate of strychnine and nitroglycerine.

In every case you should examine the heart, and, if you find any trouble at all, give strychnine.

The following are some causes for the administration of chloroform in obstetrics: "To lessen suffering produced by labor pains; to lessen the pain attending certain obstetric operations; to relax the uterus when its rigid contraction interferes with version; to promote dilatation of the os uteri; to reduce excessive nervous excitement, which may interfere with progress of early stage of labor; to relieve eclamptic convulsions and mania; to relax the abdominal wall and lessen pain, while the uterus is being pushed down in cases of abortion, when the finger is being introduced to remove retained secundines; in craniotomy to forestall unpleasant recollections; in cases of uterine inversion to relax the constricting cervix and to facilitate replacement; in bipolar version to lessen pain of introducing the hand into the vagina; in precipitate labor to suspend action of voluntary muscles and retard delivery; to dissipate 'phantom tumors' while making a differential diagnosis of pregnancy; to relax the os and cervix uteri while introducing finger to diagnosticate between uterine and extra-uterine pregnancy; in all cutting operations upon the abdomen; and sometimes in sewing up a lacerated perineum, when many sutures are required. In this last instance, and in all cases when chloroform is used after delivery, the greatest care is necessary. Chloroform after delivery should be avoided if possible."

Hirst says the dangers and disadvantages that it is claimed result from the use of anesthetics in labor are: "A prolongation of the process by weakening the uterine contractions and increasing the intervals between them; a disposition to post-partum hemorrhage; an increased liability to sepsis after labor by a relaxation of the uterine muscle and subinvolution of the uterus." But he says "these objections are ill-founded if the anesthetic is administered in a proper way. Accurate observation in some of the large German lying-in hospitals has demonstrated that an anesthetic, if not pushed too far, has no influence on the power, duration, or frequency of the pains. Subinvolution is never seen as a result of anesthesia unless it is pushed too far."

Playfair, in his last edition, says: "The practice has become so universal that no argument is required to establish its being a perfectly legitimate means of lessening the suffering of childbirth. Indeed, the tendency in the present day is in the opposite direction; and a common error is the administration of chloroform to an extent which materially interferes with uterine contractions and predisposes to subsequent post-partum hemorrhage."

Playfair, in speaking of chloroform and ether, says: "Practically speaking, the only agent hitherto employed in this country is chloroform, although the bichloride of methylene and ether have been occasionally tried."

The use of chloral in the first stage of labor does not interfere with the use of chloroform in the second stage.

The Manner in which to Administer Chloroform. You must withhold the chloroform until the correct time to administer it. The patient will beg for it, pray for it, cry for it, and even try to make those present use force to make you give it. But hold until the perineal stage—latter half of the second stage. This is the time woman suffers the most; large beads of perspiration stand out on her forehead, run down her cheeks, eyes bulging and quivering with pain, the whole form being on a rack of misery. Now take your chloroform inhaler and place it firmly over patient's nose and mouth. If you have not the inhaler, use a small handkerchief saturated with chloroform, or a tumbler containing a piece of blotting paper.

As you feel a pain coming on, sprinkle about a drachm of chloroform on the inhaler, and instruct her to take deep inspirations before the pain reaches its height. The patient will take two or three deep inhalations—for they readily inhale—and at once the severity of the pain will be lessened. As the pain ceases, remove the inhaler, and then as the next pain comes on, replace it, only allowing it to remain during the pain. By this method of administration it will be impossible to give enough chloroform to cause danger. She may cry out just as loud as if chloroform had not been used, but afterward will tell you that she suffered very little, and invariably will thank you for having used it.

Chloroform may be used in the first stage of labor, though when the pains are severe in this stage, I prefer hydrate of chloral.

There is danger of having to use chloroform too long when given in the first stage, thereby decreasing uterine force and predisposing the patient to hemorrhage. The same, perhaps to a less degree, applies to the first part of the second stage of labor. During the perineal stage, or at any stage, the chloroform may be pushed to complete anesthesia—surgical extent if necessary—but in natural labor only to its obstetrical extent. If there are any members of this Society who have never used chloroform, try it, and you will be so well pleased that you will use it in every case of labor. You will thereby receive the everlasting gratitude of your patients and be a blessing to the female sex.

LOUISVILLE.

SUPRARENAL EXTRACT IN THE TREATMENT OF ADDISON'S DISEASE (CLINIC).*

BY R. ALEXANDER BATE, A. B., M. D.

This case was reported at the Louisville Society of Medicine, and referred to in a paper upon Animal Extracts read before this Society at Maysville.

The following history is taken from the notes of the case made about two years ago, when the patient first came under observation. Mr. C., aged fifty-four years; occupation, teamster; family history good with the exception of one child suffering from epilepsy. Upon physical examination it was observed that the skin of body and limbs was of a lemon yellow color, face and hands dark bronze, mucous membranes of the mouth and conjunctivæ brownish red, and the hair was black; there was tenderness over the epigastric and lumbar regions; both kidneys were elongated and tender; there was also epigastric pulsation due to a cylindrical aneurism of the abdominal aorta.

There was a history of continuous epigastric and lumbar pain, and occasional aching in the joints and frequent spells of faintness without loss of consciousness, enfeebled strength with constant weariness. Diarrhea would occur without any assignable cause, and would be very persistent in its course; there was nausea at times, and the mouth constantly filled with slime.

Pains extending from the epigastric region downward over both iliac arteries and upward and especially toward the left arm were considered dependent upon the aneurism.

The urine was voided frequently; color, bright red; of acid reaction; containing uric acid in proportion to urea of 1-43; also uroerythrin, melanin, biliary coloring matters, and indican in excess. In this case the aneurism has been recognized for the remarkable period of thirty-five years.†

At the age of fourteen the patient felt something give way in the abdomen while straining to save his father from being crushed by a log. In addition to the aneurism there is a history of traumatic injury having occurred about twenty-six or twenty-seven years ago that caused depression of the sternum just above the xiphoid cartilage.

The pathology of morbus Addisonii is still very uncertain, but in this case it is susceptible of but two explanations. Either the blow causing depression of the sternum deranged the semi-lunar ganglia, at

* Read before the Kentucky State Medical Society, May, 1899.

† Dr. Kalfus, now deceased, diagnosed aneurism in 1864.

least the suprarenal plexus, interfering with the action of the sympathetic, which is tonic to the blood-vessel walls, causing rhythmical contraction, and would thus permit dilatation of the vessels with consequent congestion of the suprarenal bodies, or the aneurism may not only act in this same way, but can press directly at least upon the left adrenal. Thus both functional and morbid changes in the suprarenal glands can be understood. So that the symptoms of Addison's disease can be seen to occur from a deficiency of suprarenal principle in the system, no matter whether the glandular inadequacy is dependent upon functional or morbid changes.

Consequently upon isopathic principles this patient was put upon the suprarenal extract, and a prognosis favorable concerning the Addison's disease was given.

One twelfth of a grain of the extract of suprarenal glands of sheep was administered three times daily. This has been kept up more or less constantly ever since, and for the past year the patient has been able to earn his living at his usual occupation. The asthenia, nausea, dizziness, faintness, and pigmentation have almost entirely disappeared.

The pains produced by the aneurism of course still remain, though somewhat lessened, most likely from potassium iodide, which was administered for that purpose.

Upon two occasions when the suprarenal extract could not be obtained within ten days attacks amounting almost to syncope occurred, there were cold, clammy sweats and muscular twitching followed by slight fever and a bounding pulse, averaging about ninety beats per minute, and there was a general feeling of approaching dissolution. The extract has apparently been almost specific in this case. Of course, should the medication be discontinued the symptoms will return, since we have simply supplied artificially that which is normally secreted.

This drug should be as nearly specific in exophthalmic goiter as in Addison's disease, since it is the true antidote to thyroid extract; it is indicated in all conditions attended by loss of muscular power, probably in the same cardiac derangements in which digitalis is used, in subnormal temperature associated with asthenia, is anemia and melanemia, in neurasthenia and conditions requiring vasomotor stimulants.

At the risk of being tedious this case is again brought before the Society, believing the results obtained justify repeated efforts to extend the use of this most valuable agent so generally viewed askance.

LOUISVILLE.

Reports of Societies.

KENTUCKY STATE MEDICAL SOCIETY.*

[CONTINUED FROM PAGE 72.]

Discussion of "The Closure of the Abdominal Wound After Laparotomy," by Dr. Arthur T. McCormack, of Bowling Green.

Dr. W. H. Wathen, Louisville: I hardly know what to say upon the subject that has been so briefly and so scientifically presented by Dr. McCormack. The method he has described of closing the abdominal wound is certainly as good as any I have heard described or read of, or that I have practiced. It is impossible, it seems, to get a consensus of opinion as to what is the best method of closing the abdominal incision. There are, as he says, noted surgeons to-day who will use a suture through all the wall. The interrupted suture, silver wire, silk, or silkworm gut—sometimes even chromicized catgut—are used, and I must agree that there are many cases where the union has been made by these methods and there has been no future trouble, and the results have been as perfect as it is possible to have them. In these instances the results will not be good unless the fascia is pulled well out and the suture is introduced on the angular projection on which we have the fascia. However, in order that we may get the best results, I think the better plan is that described by Dr. McCormack. I am glad to see that he suggests the interrupted suture for the fascia, because if you use the continuous suture you will often have suppuration far beyond your expectation. You will compress the tissue more at one point than at another, and therefore you will have tissue necrosis from strangulation. This is obviated by the use of the interrupted suture. One of the prettiest methods of uniting fascia and muscle that I have seen is that used by Dr. Marcy, of Boston, in which he uses the kangaroo tendon. I assume that chromicized catgut would do just as well. He threads one suture after the other, and when he gets through he has absolutely even pressure at every point, and he never has suppuration and always obtains perfect union. After that he completes closing the wound by subcutaneous suture of the fat, if there is much fat present, and then he concludes it by running a suture through the skin just above the wound, and then introduces it just under the sur-

*Meeting held in Louisville, May 17, 18, and 19, 1899.

face from one side to the other, until he has brought the entire wound of the skin in apposition with the wound; then he has the suture emerging half an inch below the wound, and it is perfectly smooth. He then covers it over with iodoform collodion, and puts over the wound only a few fibers of cotton to give it strength. He uses no binder. He pursues the same treatment in hernia, and all his cases recover very well. I endorse what the doctor says in reference to hernia following abdominal operations. We find it in the practice of men who do good work. For that reason I agree with Dr. McCormack that whenever this work can be done by the vaginal route, that is the better course to pursue.

Discussion on "The Use of Chloroform in Labor," by Dr. W. B. Gossett.

Dr. Lewis, Owensboro: I was waiting patiently for some one else to discuss the paper. I feel a little afraid, after listening to a paper such as that in the nineteenth century, when chloroform is used so extensively, to raise my hand, even in the slightest degree, against the use of chloroform in labor. I have had some experience along this line, and I have had some recollections come to me that I regret. I make this preface because I don't want anybody to think me an old-timer, or that I have not used chloroform. I have had experience with it, and have sometimes had cause for regret. It is not only the digital examination which enables us to tell exactly the progress of labor. There are but very few women who do not object to being frequently interfered with in the progress of labor. There are other things that will indicate the progress. It is often better for the doctor to be in the next room reading a book than to be sitting beside the woman showing his interest. I believe that without chloroform the woman has less trouble following. After the use of chloroform I can not believe the uterus returns to its natural condition so well later on. I believe chloroform retards labor, and nausea often follows its use; and, on the whole, I do not think the indiscriminate use of chloroform should be resorted to. There is hardly a woman in labor but would grasp at any thing. She wants to get away from the pain, no matter by what means. If you tell her chloroform is the thing (and of course her neighbors have told her), then she will want it. Some neighbor tells her: "I took chloroform at the birth of my last baby," and then, of course, this

woman wants the administration of chloroform. I do not object to the use of chloroform, but I do not think we should use it in every case.

Dr. Taylor: I want to thank the essayist for his paper, and I heartily endorse every thing he says. I think I am a little more enthusiastic on the subject of chloroform than he is, because I use it a little earlier. Just as soon as the cervix is large enough for the head to get out I commence the administration of chloroform, and by the time the head is pushing the perineum I have the patient almost anesthetized, and by the time of the last pains the woman experiences no pain at all. I have never seen the administration of chloroform lessen the progress of labor. It always relaxes the muscles, and I think favors delivery. There is also less shock. I give chloroform to relieve pain whenever I can, for that is our mission on earth.

Dr. Thornton, Gravel Switch: I do not think that all cases of labor require chloroform. Some cases go through with very little pain, and in those cases chloroform does not seem to me to be necessary. I doubt whether labor is altogether a physiological process. The higher you go in society the more susceptible to the pangs of parturition the woman becomes, and the lower in the scale of society the less pain we have, and the less call for chloroform. Then there is another objection: that is the danger of the use of chloroform. If you ask a doctor when he goes to use chloroform if there is danger, he will respond: "Yes, there is a little danger." The chloroform relaxes the muscles, relieves the pain, and gives the woman the ability and the will to bear down under pressure which she would otherwise give back from when it produced pain. I use chloroform whenever I think it is indicated, just as I would use forceps, and not always when a woman wants me to, but when she wants me to and I think the case indicates its use. Both of these agents are powerful to do good, and both of them are powerful to do harm. In the hands of the intelligent physician they can relieve the patient of hours of untold suffering, and they also save the doctor hours of time.

Dr. Snyder: The use of chloroform we are doubtless all acquainted with. The majority of physicians, I find, are afraid of it under almost any circumstances. I use chloroform whenever I deem it necessary. I do not believe any set rule should be laid down to govern everybody in its use. Take into consideration the state of affairs and exercise your judgment, and administer chloroform if you think it necessary.

Dr. Austin, Bagdad: I have been using it since 1883, and I recommend it highly. There are some cases that do not particularly need it, but in the majority of cases I administer it as the essayist indicates.

Dr. W. B. Gossett: I make it a point to give chloroform in all cases. Certainly you can not lay down any fast rule to govern all cases. I say use chloroform to the obstetrical extent, not to the surgical degree; and there is a time to use chloroform to the obstetrical extent. The first stage of labor we know is the stage of dilatation. For two or three days before there is possibly some pain in the back and side. The second stage is the stage of expulsion, which is divided into two sections—the first and second halves. The latter half is known as the perineal stage, and we know that the severest pain we have is as the head of the child is going over the perineum. At this stage is the time we should use chloroform to the obstetrical extent. Of course, sometimes we may need to use chloroform in the first, second, and third stages of labor, but in the normal case of labor chloroform need be used only in the perineal stage, as the head passes over the perineum.

“Ametropia and Heterophoria, with Remarks on Eye-Strain,” by Dr. A. G. Blincoe, of Bardstown.

Discussion. Dr. Ray: The eye men, like other specialists, have the reputation of being narrow-minded and of looking at only one thing. It is my impression, however, that as specialists we do not find so many wonderful cures following the adaptation of proper lenses as do some of our general practitioner friends who drift into the practice of ophthalmology. I must say I have never seen a single case of chorea, of epilepsy, or any organic disease cured by the adaptation of lenses. I have examined a good many cases in reference to eye defects, and I have yet to record a single case of relief from any of these diseases due to the use of glasses. We know an emmetropic eye is rare; the majority of people are hypermetropic. If that is true, why is it that an individual with a quarter of a dioptré out of the way should be relieved of epilepsy or chorea by the use of lenses? People from forty to forty-five years of age often come to us for the adjustment of glasses, and we find sometimes from two to four dioptrés of hypermetropia. They have then reached the time in life when they are unable to overcome the defect. When young they were able, by muscular effort, by what we call accommodation of the eye, to conceal the defect.

When they reach forty or forty-five they begin to have failure of accommodation, and they then seek glasses. But if you carefully examine and question them, you will find that a very small percentage of them ever suffered from any of the diseases we hear so much about being due to eye-strain. Now and then cases seem to be caused by some defect of the eye muscles. We have heard a great deal in the past ten years about the eye muscles, and I am in the habit of finding exactly the strength of the eye muscles, but when it comes to treating them, that is another thing. I do not believe that any organic disease, such as epilepsy undoubtedly is, is ever cured by a tenotomy of the eye muscles, nor do I believe that chorea is ever cured by tenotomy of the eye muscles. Then when it comes to adapting lenses and prisms, my experience, and the experience of men of national reputation with whom I have talked, is that prisms are very unsatisfactory. We all agree with the essayist that undoubtedly defects in the eye should be corrected. In many of these cases with slight defects, in which lenses are put on and cure them, the result is absolutely a mental effect and not due to any direct effect on the eye-strain. Furthermore, we often see, after wasting diseases lasting several weeks or months, that the general vigor is lessened, and in convalescence the patient suffers from eye-strain. This often occurs after typhoid fever. If they come to an eye man and he relieves the strain, he thinks he has cured them, but later they regain their vigor and lay aside their glasses.

Dr. O. M. Kelsey, Elkhorn: I would only call attention, gentlemen, to one or two points in connection with the paper which was read. It has been stated by the essayist that perhaps such a thing as a normal, natural state of the eye does not exist; that is, as a mathematical perfect optical instrument. The eye should be viewed from two standpoints, as an organ of vision and as an optical instrument. It having been agreed by authorities that such a thing as a normal perfect mechanical eye does not exist, perhaps we look at the matter from a mistaken standpoint when we regard the emmetropic eye as the perfect eye. It may be that the hypermetropic eye is the normal eye under natural circumstances. The conditions of life are the occupations of husbandry and hunting and fishing, in which the sight is normal at the horizon. A little hypermetropia gives just enough stimulus to the eye to see perfectly just this side of the horizon, so what we regard as hypermetropia might be regarded as normal, and any departure from this should be attributed more to the pursuit which the individual

follows. Farmers, those engaged in husbandry, those engaged upon the plains, cowboys, Indians, never complain of any necessity for glasses except for reading, that is, when they reach forty or forty-five years of age and the powers of accommodation fail. So I think we make a mistake in regarding the hypermetropic eye as the abnormal eye. It should be regarded as the natural eye, and the differences attributed to the pursuit the individual follows. We find in city practice many vigorous men and women engaged in pursuits which require close vision. Then is when the eye is strained, and then is when there is need for glasses, and it is usually of the hypermetropic character. The strain has been carried beyond the powers of the individual, and it is more apt to cause myopia or short reading, which is a disease that is usually stopped by the adaptation of proper glasses to meet the conditions. Beyond a certain degree hypermetropia of course constitutes a defect which must be corrected.

Dr. A. G. Blincoe, Bardstown: In regard to Dr. Ray's statement that the general practitioner who takes up refraction work finds more diseases due to eye-strain than the oculist, that is nothing at all wonderful to me, for the people do not come to the oculist unless they are compelled to. But the general practitioner who is able to do refraction work properly will find many patients who are run down and debilitated and complain of various nervous disturbances whom he is able to build up only a little with tonics, and in these cases he will find some error in refraction or muscular strain, or both, and when that is corrected the patient picks up and improves. I could relate case after case that I have fitted up with glasses, and some on which I have done tenotomies, with benefit to the patient. The general practitioner would probably thus see cases that the oculist does not see.

"Suprarenal Extract in the Treatment of Addison's Disease," by Dr. R. Alexander Bate, of Louisville.

Discussion. Dr. Frank C. Wilson, Louisville: I remember in looking over this case that it was exceedingly interesting. There was considerable discoloration. I was interested much in the abdominal pulsation, and in the question whether there was a distinct, unmistakable aneurism or not. There was certainly a pulsating tumor in the course of the abdominal aorta. It would seem strange, of course, that an aneurism should have existed so long, the tumor having been sus-

pected or diagnosed as much as thirty-five years previous. The tumor seemed to be extensive, pulsating, and I was satisfied that there was a certain amount of aneurismal enlargement; it seemed to me rather of a fusiform character than as a distinct sac on the abdominal aorta. This was in the neighborhood of the suprarenal capsules, and undoubtedly had much to do with the symptoms from these; that is, the pressure from this mass may account for many of the symptoms presented. The result has certainly justified the recommendation of the extract of this gland, and it certainly should interest the profession at large.

Dr. Thomas H. Stucky, Louisville: I am thoroughly familiar with this case, and I want to most heartily approve of the results obtained by the essayist, and to compliment him upon these good results. The question that concerns us most in the management of cases of this type is an established value of the animal extracts in these various organic deficiencies. Those of us in general practice who have had to deal with the patient after leaving the surgeon for double oöphorectomy have all experienced in this neurasthenic type, which frequently follows, the wonderful value of the ovarian extract in controlment of this condition of neurasthenia. We also have been able to observe the benefits of the testicular as well as the thyroid extracts. My experience in the use of the suprarenal extract has been limited to only two cases. In both cases I believe the deduction may be safely made that the extract has been of marked therapeutic value. Whether this is due to the supplying of a deficiency or not I am not prepared to say, but I am prepared to say that in the vast majority of cases, where the animal extracts are used and there is a deficiency in the secretion of the organ for which they are used, that there is an established physiological benefit. I believe the therapy of the future largely lies in the enhancement of the use of the animal extracts in a field far larger than that which they now occupy. I believe this case had an aneurism, and that it was fusiform in character. You all recognize the factors, excluding traumatism, that play such an important part in the production of aneurisms. Whether there is a history that would be of importance we do not know, but it seems that this thing, in which we have heretofore obtained such miserable results, is going to yield to modern therapy.

[TO BE CONTINUED.]

foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The London Hospital; Advice to Dental Students; To Prevent Lead-poisoning; Extension of First Aid; Society for the Study of Cancer; Queen's Nurses; A New Hospital for South London; Royal Maternity Charity; A Well-known Dog; Red Light and Measles.

The bacteriological laboratory of the London Hospital Medical College has been opened by Lord Knutsford. The London Hospital School was founded about one hundred and twenty-four years ago, and was the first complete school of its kind with the faculties of a university. For some time it has been felt that new premises must be provided; thus the students have now an up-to-date designed and equipped establishment. Lord Knutsford eulogized the splendid work of the hospital in a crowded and busy district, and pointed out how indispensable for the proper training of doctors was such a department as the Medical College.

Sir Richard Powell when distributing the prizes to the successful students of the London Dental Hospital urged them not to lose sight of the fact that in their sports and amusements they should acquire much of the manual dexterity that was so essential to their success in their profession. He named fencing, instrumental music, and billiards as being most useful.

With a view to prevent lead-poisoning among the workmen the Admiralty has ordered to be issued nail brushes to workmen using red or white lead. Proper places are to be provided in the dockyards for the employes to wash their hands; troughs in which the water is regularly changed are to be placed in convenient positions, and copies of the regulations drawing attention to the necessity of frequent washing of the hands and rinsing the mouth with water will be posted in prominent places. Furthermore, workmen using lead are required to attend at the surgery half an hour before bell-ringing at noon on Saturdays to submit themselves for medical inspection.

Some time ago a committee was appointed by the Board of Trade to inquire into the providing of first aid in the mercantile marine. They have made the following report: "As regards merchant ships which carry no medical men, they are of opinion that it would be highly desirable that no ship should be allowed to proceed on a long voyage unless there be some one on board who has passed through a course of instruction in 'first aid' to the wounded. They think this might gradually be brought about if it were made compulsory on every mate who presents himself for examination for a master's certificate to produce evidence that he has passed through a course of instruction." This recommendation is very favorably received by the Shipmasters' Society.

A meeting was lately held for the inauguration of the Society for the Study of Cancer, at which Sir Charles Cameron presided, when it was shown that the ratio of deaths to each million of people in England and Wales had risen from 385 in 1864 to 787 in 1897. The victims were mostly women, and the mortality was on the increase. The object of the new society was to found a special laboratory for laboratory research, it being further urged that a parliamentary inquiry should be promoted to determine the mortality from this disease. The president said every effort would be made to combat this fatal disease, and he referred with confidence to a similar pioneer work which had already been accomplished in other medical fields with such splendid results. He was sanguine as to the society's future, and hopeful that its efforts would result in the protection of human beings against one of nature's most awful scourges.

A recent study of the returns of the Registrar General shows that the duration of human life is about thirty-three years. A quarter of the people die during the seventh year, and half before their seventeenth year; of every one thousand persons, only one reaches one hundred years, six in one hundred get to sixty-five, and one in five hundred to eighty.

A few days ago a batch of one hundred nurses who have recently qualified to serve as "Queen's Nurses" paraded at Kensington Palace to receive their badges and certificates at the hands of Princess Louise. The order of "Queen's Nurses" was founded as a memorial of the Queen's Jubilee in 1887, with a view of providing timely succor to the sick poor, who, but for such aid, would be unable to count upon adequate relief. Her Majesty gave the sum of £70,000, which had been subscribed by the loyal women of Britain to commemorate the fiftieth anniversary of their sovereign's accession, as an endowment of an institution that sends to the homes of the very poor the most skillful of trained nurses, each of whom must have attained to the highest standard to be admitted within the ranks of "Queen's Nurses."

Hospital accommodation for sick children in London south of the Thames is in proportion to the population only one fourth of that available north of the river. It is now proposed to transfer an existing hospital to a more useful site in Kensington, and it is hoped to raise £50,000 for the purpose. A special feature in the new hospital will be a special baby ward for the training of nurse maids in the care of infants.

The Royal Maternity Charity is the institution to which the Duke of Argyll some years ago referred when he made use of the description, "all London is its hospital and every street a ward." Instituted a hundred and forty-two years ago, more than half a million poor women have been successfully attended by the charity in their own homes, and Dr. Fancourt Barnes, the physician in chief to the institution, was lately enabled to publicly state that each year the number of applicants increased.

"Leo," the dog belonging to the Women and Children's Hospital, is no more, and has been succeeded in his benevolent exertions by his eldest

son. Some time ago the dog won the proud distinction of carrying off the cup offered by the Prince of Wales to the dog who collected the largest amount for a hospital. He was always to be seen in the streets with his collecting box strung round his neck, and during his life he collected upward of one thousand pounds.

A medical authority states that red light has in his hands been found extremely useful in the cure of measles. In one case a child suffering with this disease was brought within red rays by means of red blinds and a photographer's lamp, and in three hours the rash had disappeared, the fever subsided, the child only complaining of the want of light. Upon the blinds being removed the eruption and fever returned in three hours; the red light again asserted its supremacy by disposing in two hours of the rash and fever. Three other children he has since treated in a similar manner with like success.

The Medical Officer of Health for Birmingham has reported highly upon the satisfactory result of the work of the four women health inspectors appointed a few months ago. They have paid a large number of visits, and their tact, intelligence, and firmness in carrying out the Health Committee's instructions have been productive of much good.

LONDON, July, 1899.

Abstracts and Selections.

ABDOMINAL SECTION UNDER COCAINE ANESTHESIA FOR RETROVERTED ADHERENT UTERUS IN A CASE WITH MARKED CARDIAC SYMPTOMS AND GOITER.—The following case is of interest for several reasons. Quite an extensive operation was performed under cocaine anesthesia; the abdomen was opened, the adherent retroverted uterus was released, brought forward and stitched to the abdominal wall. As a result the patient was entirely relieved of the local symptoms, namely, the backache and pelvic discomfort of which she had complained for over a year. At the same time her general condition improved, the cardiac symptoms became less pronounced, and the goiter diminished considerably in size. The history of the case is briefly as follows:

The patient, a married woman, aged thirty-three, presented herself at the gynecological clinic at the Charity Hospital two years ago, complaining of backache and of general pelvic discomfort. On examining her at that time I found the vaginal outlet much relaxed, the uterus being in marked retroposition and adherent; both ovaries were prolapsed and could be felt lying in the pouch of Douglas. At this time also cardiac symptoms and the presence of a goiter were noted, and she was consequently referred to my colleague, Dr. J. P. Sawyer, who treated her for this condition with some apparent improvement. One year later the patient returned to me

with the request that I would undertake some operative procedure for the relief of her backache and the pelvic symptoms. On examination I found the pelvic structures in much the same condition as they had been on the previous occasion. It was impossible to obtain a complete history, as the patient was a Pole and spoke and understood very little English. She was admitted to the Lakeside Hospital October 10, 1898, at which time the following notes were made:

The vaginal outlet is much relaxed; the vaginal walls are prolapsing. The cervix uteri points toward the symphysis pubis. The uterus is in a retroverted position; it is somewhat enlarged and adherent. The ovaries are prolapsed. The general physical examination gives the following:

The patient is of medium size, somewhat poorly nourished, and rather anemic. The lips and mucous membranes are a little pale. Tongue coated. The pupils are equal and react to light and accommodation. The eyeballs protrude slightly. Pulse 130 to the minute, regular, and of a good volume; tension high. There is a goiter which involves both the right and left lobes of the thyroid gland; the right lobe is the larger. On inspection marked pulsation is evident over both lobes. On palpation a distinct thrill can be felt over both lobes; more marked in the left. On auscultation a hum is heard over both lobes, and over the right a distinct musical tone. The circumference of the neck over the most enlarged point of the goiter measures 34.2 cm. ($13\frac{1}{2}$ inches). The horizontal measurement of the swelling is 14 cm. ($5\frac{1}{2}$ inches); the vertical, 6.3 cm. ($2\frac{1}{2}$ inches). The thorax is emaciated, the ribs are prominent. The intercostal spaces are wide, and the costal angle is acute. Expansion is good and about equal on both sides. Chest clear on percussion. Breath sounds normal. The apex beat of the heart is in the fourth space inside the nipple line. Relative dullness at the third rib and at the left sternal line. A well-defined systolic murmur can be heard all over the chest, but is most marked at the apex. The second sounds are clear. Hepatic and splenic dullness is normal. The borders are not palpable. The kidneys can not be felt. The abdominal muscles are relaxed, and there is a marked tenderness in both iliac regions. There is some tenderness over points in the line of the tibia; there is some edema of the legs, which is increased after walking. The urine shows nothing abnormal.

In order to relieve the pelvic condition it was decided to release the adherent uterus. The operation was performed October 10, 1898, at Lakeside Hospital. Owing to the general condition of the patient it was thought better to employ local anesthesia. Eight minims of 5 per cent solution of cocaine having been injected beneath the skin, an incision was made in the median line down to the muscle sheath. Eight minims more were injected at different points along the median line into the muscular structures, and the incision was then carried into the peritoneal cavity. The adhesions binding the uterus down to the rectum were then separated without any apparent discomfort to the patient. It is to be noted, however,

that even slight traction upon the ovaries seemed to produce considerable pain. The uterus was brought forward and stitched according to the ordinary suspension method. The peritoneum was closed by means of a continuous catgut suture; chromicized catgut was used for the fascia, and a continuous subcutaneous catgut suture for the skin incision. The patient made an uninterrupted convalescence, and left the Hospital November 8, 1898, twenty-nine days after her admission. At the time of her discharge she was entirely free from backache and from all pelvic discomfort. The circumference of the goiter on October 20th was 33 cm. (13 inches), and on October 25th, 31.8 cm. (12½ inches). When she left the hospital on November 8th, it measured twelve inches, a reduction of one inch in twenty-nine days. The pulse at the time of her admission varied between 106 and 150. After the operation the rate gradually diminished, and at the time of her discharge it averaged about 104. The diminution in the size of the goiter and the slowing of the pulse were probably in the main due to prolonged rest in the horizontal position, and perhaps also to some extent to the tincture of digitalis, which was given in small doses—ten drops twice a day after the fifth day after the operation. On the whole it may be safely said that the patient has received marked benefit, and up to the present time (February 14, 1899) there has been no return of her former symptoms.—*Hunter Robb, M. D., in the Cleveland Medical Gazette.*

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS AT BERLIN.—The International Congress on Tuberculosis was opened with much ceremony on May 24th in the palace of the German Reichstag in the presence of the German Empress. Representatives attended on behalf of the German and other governments, medical societies, learned bodies, etc., and a great number of members had come from all parts of Germany and abroad. The chair was taken by the honorary President, the Duke of Ratibor, who, in his inaugural address, pointed out that not only the medical profession but all classes of society must unite in the campaign against tuberculosis, and that the Congress was not a purely scientific one, but a great international work. He thanked the foreign delegates for attending this meeting of German physicians and philanthropists, and he was sure that their opinion and advice would be listened to with great attention. The Minister of the Interior, Count Posadowsky, President of the National Association for Providing Sanatoria, then delivered an address, saying that the great development of the factory system had been favorable to the increase of tuberculosis, and that it was the duty of the well-to-do classes to concert measures against this most widespread of all diseases. Alluding to the conference at The Hague, he said that it was a good omen that two congresses were meeting at the same time—the one to mitigate the horrors of war, the other to repress the disease which was the most terrible enemy of humanity. Addresses of welcome, delivered by the Mayor of Berlin and the Rector of the University, Professor Waldeyer, were followed by speeches made by

the foreign delegates. The representative of America, Dr. von Schweinitz, spoke first, then Professor Brouardel on behalf of the Academy and Faculty of Medicine of Paris, and Sir Thomas Grainger Stewart in the name of the British delegates. Professor Maragliano, of Genoa, was the representative of Italy; Dr. von Kury and Professor Koranyi, of Austria and Hungary, and Dr. Bertenson, of Russia. The inaugural proceedings were closed by the Vice-President, Professor von Leyden, who pointed out that phthisis was no longer reckoned an incurable malady, and that the medical profession was glad to join with all classes of society in controlling it.

Dr. Köhler, Director of the Imperial Health Office, read the first paper. Taking as his subject the spread of tuberculosis, he said that notwithstanding the incompleteness of the statistics, the increase of tuberculosis throughout the world was unquestionable. Tuberculosis occurred in every country. Of the European States, Great Britain, Belgium, and Italy were the least affected, whilst Hungary, Austria, and Russia were the most heavily visited by the disease. In Germany the average mortality was 2.25 per cent per thousand of the population. The influence of altitude and meteorological conditions was not yet precisely ascertained. The male sex was more liable than the female. The greatest number of deaths occurred between twenty and thirty years of age. From 1894 to 1897, 87,600 persons died annually from tuberculosis in the age-period from fifteen to sixty years. It was thus the duty of society to combat tuberculosis as energetically as possible, and that not only by destroying the bacillus, but also by strengthening the resisting power of the human organism.

Dr. Krieger (Strassburg) said that social conditions had an undeniable influence on the spread of the disease. It had not yet been ascertained statistically what effect food and house accommodation exercised, but it was an established fact that association with phthisical subjects in small dwellings facilitated infection. The cleansing of living-rooms and the destruction of sputa containing bacilli were therefore of the greatest importance. Different occupations predisposed to tuberculosis in varying degrees; nurses and persons who worked in close rooms, such as tailors and printers, were very liable to it.

Dr. Gebhard (Lübeck) then spoke on tuberculosis from the standpoint of the workmen's insurance laws.

Surgeon-General Schjerning pointed out that the medical department of the German army had laid great stress on measures to prevent the spread of tuberculosis in the army. To this end the soldiers were better fed than before; they were better clothed, and among other hygienic measures the barracks were improved from a sanitary point of view. Special sanatoria for phthisical soldiers had been opened in order to isolate the patients as soon as possible. The result, he said, was that since 1882 the mortality from tuberculosis had decreased. In places where phthisis was rife among the civil population the garrisons used to be infected to a high degree, the disease being obviously conveyed from the civil population to

the military, especially to those employed on indoor duty as clerks, and to the bandsmen, among whom a great mortality prevailed. The majority of military patients were found among men in the first year of their service, and it might be inferred from this fact that some of them were already infected before entering the army, proving that recruits ought to be examined with great care before being enlisted.

Professor Bollinger (Munich) said that in view of the increase of tuberculosis among cattle, the consumption of raw meat ought to be avoided. He referred also to the use of milk from tuberculous cows as very dangerous, especially to children. Infantile tuberculosis he considered to be mostly conveyed to the children by unsterilized milk. Microscopical examination of meat ought to be made compulsory by law.

Dr. George Meyer, medical officer to the Printers' Sick Club in Berlin, drew the attention of the congress to the fact that the mortality from tuberculosis among the Berlin printers had not decreased during recent years. More than 40 per cent of printers who had died were phthysical, and in women working in printing-offices the mortality was still higher.

Professor Flügge said that it was now an established fact that Koch's bacillus was the cause of different forms of tuberculosis in human beings, of pulmonary, laryngeal, glandular, and miliary tuberculosis, and of lupus. In necrotic tuberculous tissue the bacillus perished, as had been stated by Professor Koch himself. It had been said by some authorities that there existed other bacilli, which, like Koch's bacilli, were not destroyed by acids; for instance, the bacillus of lepra and the bacillus in smegma, but after careful examination it had been acknowledged that the biological qualities of these bacilli were quite different from those of Koch's bacilli. By artificial culture the relations of these different bacilli had been ascertained. The endeavor to refute the doctrine of the specificity of Koch's bacillus had, therefore, Professor Flügge considered, been unsuccessful.

Professor Fränkel (Halle) said that not every phthysical patient was a danger to other people. The bacilli were found in the sputa, and they knew by the researches of Dr. Cornet that tuberculosis was spread nearly exclusively by dried sputum. The mode of infection had been ascertained by experiments upon animals; injections of tuberculous cultures produced local tuberculosis, and it was known that children playing on a floor soiled by tubercle bacilli were liable to suffer from tuberculosis of the glands, the bacilli entering through the mucosa of the mouth. Tuberculosis of the lungs was produced by inhalation of tubercle bacilli coming either from dried sputa, as stated by Dr. Cornet, or from minute air-borne particles of water containing bacilli, according to Professor Flügge's opinion. Both modes of infection might be present together. Professor Fränkel finally said that a healthy organism was able to destroy the bacillus, and that people living in dirty or badly ventilated dwellings were more susceptible than others.

Professor Löffler (Greifswald) said that heredity had been for a long time believed to be the cause of phthisis. Hereditary tuberculosis, how-

ever, was present only when the mother had suffered from tuberculosis of the reproductive organs. A weak constitution might be hereditary, and the so-called habitus phthisicus undoubtedly existed. But to this disposition an infection by the tuberculous virus must be added to produce real tuberculosis. It further depended upon the virulence of the bacilli whether tuberculosis might break out or not after the occurrence of infection. He mentioned a case where an entire family had been infected by one phthisical member. A perfunctory examination might have led to the conclusion that these cases were due to heredity. An immunity against tuberculosis did not exist.

Professor Heubner insisted upon the prevention of contagion by parents. Tuberculous parents ought to be advised not to kiss their children, and, if possible, to send them to colleges, etc., where they might live separated from their families. The orphan asylums, schools, etc., where children met together ought to be carefully observed. Special sanatoria for children ought to be erected in connection with those for adults.

Dr. Kirchner stated that he has shown by statistical research that when one consort suffers from tuberculosis the other is liable to be infected. It is, of course, impossible to prevent phthisical people from marrying, but they should be advised not to marry until two years after the acute symptoms have disappeared. Both contracting parties ought to be informed of the danger which they may possibly incur, and of the preventative measures by which contagion may be avoided. Dr. Kirchner concluded by saying that under these circumstances such a marriage is relatively safe for the healthy partner, while it may even contribute to the welfare of the affected one.

Professor Virchow was of opinion that meat being relatively free from tuberculosis, the existing laws were sufficient for the control of public slaughter-houses. Imported meat and private slaughtering ought, however, to be carefully controlled. Living animals ought to undergo the tuberculin test. The greatest danger arose from the milk of tuberculous cows. The most radical measure would be to kill them; but, as this procedure is up to the present not available, the sale of the raw milk of cows which have reacted to the tuberculin test ought to be prohibited or allowed only after sufficient sterilization. The tuberculosis of pigs has been somewhat neglected, and the slaughtering of these animals ought therefore to be controlled in a more efficacious way.—*The Lancet*.

SURGICAL HINTS.—(1) Whenever you suspect the presence of severe internal injuries, never allow the patient to get up and go about very soon. It is always of great importance to secure as long a period of rest and quiet as possible.

(2) In bony ankylosis there is no pain in voluntary efforts of motion; in fibrous ankylosis there is. In the first, if the physician tries passive motion, the pain is only where his fingers compress the part; in the latter there is pain all over the joint.

(3) In any of the forms of chronic superficial inflammation of the tongue it is unwise to use caustics. These agents commonly increase the irritation, such cases showing marked tendencies toward malignant development, and must always be carefully watched.

(4) Never treat a severe burn on the flexor part of the joint without applying an appropriate splint to prevent as much as possible the occurrence of contraction. The need of skin-grafting is especially great in all burns where the result of contraction would be deformity or disability.

(5) In dislocations at the shoulder-joint, a rapid test consists in applying a straight ruler to the acromion process of the scapula and the external condyle of the humerus. If it touches both joints at the same time there is dislocation, for normally the deltoid prominence prevents this.

(6) In young people complaining of pains and swelling in the neighborhood of a joint, especially about the long bones, examine very carefully to see whether the trouble is in the joint. If it affects the bone itself, the chances are in favor of malignant rather than arthritic trouble. If malignant, the development is usually rapid. There are usually glandular enlargements. The tumor is uneven in density, the superficial veins increase fast, and the pain is more or less constant and of a shooting nature.

(7) To remove blood from the hands use soap only after washing in plain water.

(8) Sweeping and dusting should not be done just before an operation. Cover possible dust collections with wet sheets.

(9) In amputations loose muscles retract more than those attached to bone. Hence sever the loose muscles first, so that the ends may be of equal length.

(10) If the wound is clean leave it alone; the best surgeons apply but one dressing.

(11) Wash out the nasal passages before giving ether to subjects of catarrh.

(12) Scalp wounds, if large, should be stitched, but stitches should be removed early.

(13) In felon find out if the bone is attacked. Amputation of the terminal phalanx is best delayed until the septic process is overcome.

(14) In frostbite do not amputate early. Use thorough asepsis, and maintain the patient's strength.—*International Journal of Surgery.*

DUM-DUM BULLETS.—The question of the permissible limits of the use of lethal weapons, in connection with the action of the Peace Congress at The Hague regarding the dum-dum bullet, opens up a very wide and difficult subject. The object to be secured in warfare is not, of course, any unnecessarily painful mutilation, or even the death of the enemy, but his prompt disablement so as to prevent at once any further fighting on his part, and to put him at any rate *hors de combat* as far as the campaign in which he is engaged is concerned. Of course if he is killed both objects are

effectually obtained, but apart from considerations of humanity there is nothing to be gained by the employment of any needlessly cruel methods. But war is war. If it can not be altogether prevented, then the sooner it is ended the less is the loss of life not only from wounds but from disease. The object of fighting is victory, and the more speedily obtained the better. It was found in Indian hill warfare that the Lee-Metford bullet did not adequately protect the troops using it, and the dum-dum bullet is the result. It is not an explosive bullet, in the sense of containing any explosive substance, but having a soft metal nose, which expands when the bullet has once penetrated, it has been found to possess a "stopping" power which the Lee-Metford bullet did not. That this property should be present is the essential point, and the government of India are still making experiments with the view of obtaining a rifle projectile which will prove adequate for their requirements in the mountain warfare with the semi-civilized tribes in which it has so often and so reluctantly to take part. It is an absurd libel on that or any other government to suppose that they have any object in seeking to design or employ any needlessly cruel means of effecting their purpose. The amount of destruction which is dealt out by field artillery, Maxims, and other methods of warfare probably far exceeds that inflicted by "shoulder gun soldiers," as gunners call them, but no nation hesitates to use these arms.—*Lancet*.

THE DECREASED BIRTH-RATE IN FRANCE.—One hundred years ago it was reckoned that the Great Powers of Europe numbered about 98,000,000 inhabitants, and of these 26,000,000, or 26.5 per cent, were French; to-day, out of about 300,000,000, only 38,000,000, or about 12.6 per cent, belong to France. As Dr. Henry May has shown, the English birth-rate is also declining, though at a much less rate, and it is probable that the same causes as are at work in France are making their influences felt in England also. The principal of these causes is undoubtedly one which is well described by a recent writer on the subject in the *Journal de Medecine de Paris*: "The dearth of children in France is due to the fact that the French people do not choose to have families. This defective natality can not be laid to the charge of poverty. The richer a Frenchman, the fewer children he has. This is equally true in town and country . . . Grenoble, one of the poorest parts of Paris, heads the list for births, while the Champs Elysées is at the foot." That the above view is correct is borne out by a consideration of the fecundity of marriages. The number of legitimate births annually per 1,000 married women is 115 in France, 184 in Italy, 186 in Norway, 190 in England, 202 in Germany, and 205 in Scotland. According to the 1891 census, there were in France 22 families out of every 100 which had only 2 children living, and 24 out of every 100 families which had only 1 living child. The so-called neo-Malthusianism is principally responsible for the above disastrous conditions. Malthus and his disciples, in their zeal to prevent an overpopulation—which is, to say the least, a very remote danger—have "o'erleapt" themselves, and the French will have them to thank if ever she suffers eclipse as a military nation.—*Medical Magazine*.

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CHRISTIAN SCIENCE.

This fad, which has of late years been made the hobby of a set of misguided people, most of whom mean well, has assumed proportions which demand the earnest consideration of all good citizens.

There are numbers of these so-called "Christian scientists," however, that are making business out of this professed form of religion. It is used as a means of beguiling the weak and unsuspecting, used as a means of making acquaintances, and in this way finally leading up to the climax, which is to sell some supposed cure-all. These cure-alls are generally for female diseases. Women, being more credulous than men, are the ready victims of these sheep in wolves' clothing. So far as Christianity is concerned, this class of Christian scientists is void of it. It is the all mighty dollar and no soul in the consideration.

Christian science was founded or put into practice by Mrs. Mary Moss, Baker Glover, Patterson Eddy, in 1866, who seems to have been a much married woman, having had three husbands. The first and third died, and the second one deserted her, and she says that she was compelled to seek divorce. She had one child by the first husband, from whom she separated when he was four years old and did not see again for thirty years, which, according to our way of thinking, would indicate that she was not the best of mothers. She was admitted

into the Congregational Church at twelve years of age, and retained membership in it until she founded her own church, which, she says, was "built on the basis of 'Christian science,' Jesus Christ himself being the chief corner-stone."

In the August number of the North American Review Mr. W. A. Purrington thoroughly exposes this great fraud, and very properly states that "as a mere religious or philosophic theory Christian science never would have had any vogue. Its fascination lies in its pretended cures."

This is unquestionably true, and all that is asked is that the ignorant votaries of "Christian science" be not permitted to trifle with the lives of innocent and unsuspecting people. A Mr. Norton, who is a very earnest *votary* of Christian science, was asked how he would treat emergency cases, as a "fractured skull, a child strangling with a fish-bone in its throat, a case of confluent smallpox, and the severing of an artery by accident." He was also asked if in curing cancers he made differential diagnosis between them, boils, carbuncles, etc. The following is his answer: "I make no diagnosis except along the lines of consistent mental therapeutics. An expert in mental therapeutics will naturally know the character of this diagnosis. Discord is discord. Pain is pain. Disease is disease. The principle that cures one, if rightly applied, will cure all. This is the beginning and the end of rational mental healing. In relation to mental treatment for a severed artery, I said simply that I believed the proper application of mind power would do the same work if not better than any other method."

The statements of Mr. Norton are quite sufficient to prove that the whole fabric of Christian science is a mere sham, and were it not for the promises of cure it would die of inanition.

The fatalities of late resulting from the application of "Christian science" methods of healing the sick have been so numerous and the circumstances so distressing that the most disinterested must take cognizance of this reckless destruction of human life. Whatever may be said in extenuation of the weaklings who are really honest in their religious beliefs in connection with Christian science as a means of curing disease, it is a failure and must be classed along with the barbaric methods of the uncivilized races and the voodooism of our common ignorant and knavish negroes.

While we allow that religion maintains the high standard of morality among civilized nations, we shall not deny that "Christian science"

has a right to be; but we insist that its votaries should be made to confine themselves to the practice of religion, and not be permitted to attempt to accomplish impossibilities in curing diseases by faith. No sensible man or woman can believe that it is possible to lessen the pain of labor, or the pain of acute rheumatism, or the pain of a severe headache, or, in fact, any severe pain by faith. Nor will he believe that a case of diphtheria, pneumonia, or any similar disease can be cured by faith. It is an outrage upon the public to permit innocent people to become the victims of a sect who deserve such treatment as is applied to those who practice witchcraft and voodooism.

The recent act of the State of Illinois regulating the practice of medicine has unfortunately left the Christian scientists free and untrammelled to do as they please. It is to be hoped that this great oversight will soon be corrected. Every State board of health should take means to prevent this cruelty to human beings. There is a law to prevent the mistreatment of the lower animals, and while people are free to do as they please in this country, innocent children at least should be kept out of the clutches of these misguided fanatics.

NORMAL SALINE SOLUTION.

It is difficult to believe that such marked changes would follow any form of medication as results from infusion or injection of the normal saline solution. In cases where there has been great loss of blood from any cause, its effects are most marked. If it is not possible to inject beneath skin over the pectoral muscles or in the scapular region, fill the rectum. When the rectum has been filled, place a suitable compress over the anus and elevate the hips, and, if necessary, have a nurse to make positive pressure over the anus until the desire to expel the contents of the rectum has subsided.

An ordinary teaspoonful of clean common table salt to the pint of clean warm water makes the solution. A few hypodermic syringes full will often bring about a marked change, and if there is no other way of administering it, this should be resorted to.

An ordinary fountain syringe or syphon tube with a suitable needle (a hypodermic needle if nothing better can be obtained) attached makes a most excellent contrivance for introducing the normal saline

subcutaneously. Care should be taken to have every thing clean and to have all of the air out of the tube and needle, and not have the water-bag or supply more than three or four feet high, so that the pressure will not be too great.

THE KISSING-BUG.

The daily newspapers have recently been making all kinds of startling reports concerning the kissing-bug. In the beginning, it is well to understand that there is no such an insect in existence. That people have been bitten on the lip and about the mouth by insects of one kind or another there can be no doubt, and it is equally true that these happenings are not new. They have been chronicled and exaggerated until the public has really begun to believe that such an insect exists.

The only kissing thing to be dreaded is the biped with a chancre on its lip or a tubercular cavity in its lung. While select kissing is both sanitary and proper, promiscuous osculation is certainly a dangerous practice.

Notes and Queries.

A MAN in Philadelphia was awarded \$1,500 damages on the grounds that his water-supply was contaminated by an overflowing sewer.

VAGINAL HYSTERECTOMY.—A. Martin believes that a judicious combination of clamp and ligature will ultimately become the usual method adopted.

OVARIES: RESULTS OF COMPLETE EXTIRPATION.—(1) The woman becomes absolutely sterile. (2) Menstruation ceases in about ninety-five per cent of the cases. (3) The uterus and to a less extent the vagina and vulva undergo a process of atrophy. (4) The nervous symptoms of the menopause appear abruptly and violently, viz., heats and flushes, perspirations, palpitations, giddiness, depression of spirits, and a generally unstable condition of the nervous system. (5) In a considerable majority of cases there is a diminution or total abolition of the sexual instincts. (6) The patient has a tendency to obesity.—*Christopher Martin, in the Medical Record.*

THE REMOVAL OF ADENOIDS IN INFANCY.—Fortunately post-nasal adenoids when they are present in young infants do not commonly give rise to troublesome symptoms. There are exceptions to this rule, however, and

one such is quoted by the *Journal de Clinique et de Therapeutique Infantiles* of February 23d. In this case the child was aged four months. He had suffered at birth from purulent ophthalmia, a fact which may partially explain the urgency of his adenoid disorder. During sleep his breathing was so difficult that Dr. Thomas, who has reported the case, found himself obliged to resort to surgical treatment for its relief. The result was successful. The mode of procedure adopted is interesting as bearing upon the performance of an operation requiring some delicacy of manipulation. As was to be expected, a small, specially constructed forceps was employed, and a piece of vegetation was detached by a single effort, no more being done on each occasion. The process was repeated at intervals of a week, and after three sittings the naso-pharynx was clear. In order to avoid injuring the vomer—the chief danger to be guarded against—particular care was taken to direct the forceps upward and backward. In most cases of adenoid overgrowth in infancy medical treatment happily suffices to relieve symptoms and postpone the need of operation. Dr. Thomas' experience is suggestive in connection with those rare cases which call for active surgical measures as proving what may be accomplished by patience, tact, and gentleness.—*Lancet*.

THE SIGNS AND TESTS OF DEATH.—(1) Cessation of respiration—(a) Mirror test; (b) feather test; (c) water or mercury test; (d) stethoscopic test; (e) rhythmic traction of the tongue. (2) Cessation of circulation—(a) Stethoscopic test; (b) ligature test; (c) scarification and cupping; (d) opening of an artery; (e) needle test (Cloquet); (f) fluorescine test; (g) injection of ammonia (Monte Verde's test); (h) diaphanous test (Carriere's); (i) Roentgen ray. (3) Changes in the eye—(a) Test by bright light; (b) test by mydriatics; (c) test by ophthalmoscope; (d) test by ophthalmatonometer. (4) Loss of animal heat—Temperature test. (5) Loss of sensation and of motion—(a) Electric test; (b) heat test; (c) caustic test. (6) Muscular flaccidity and contractility. (7) Cadaveric ecchymoses, lividity, or hypostases. (8) Cadaveric rigidity, cadaveric spasm, rigor mortis. (9) Putrefaction.—*J. Herold, in the Medical Record*.

THE WILLIAM F. JENKS MEMORIAL PRIZE.—The Fifth Triennial Prize of Five Hundred Dollars, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "The Various Manifestations of Lithemia in Infancy and Childhood, with the Etiology and Treatment."

The conditions annexed by the founder of this prize are, that the "prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children;" and that "the trustees, under this deed for the time being, can, in their discretion, publish the successful essay, or any paper written upon any subject for which they may offer a reward, provided the income in their hands may, in their judgment, be sufficient for that purpose, and the essay or paper be

considered by them worthy of publication. If published, the distribution of said essay shall be entirely under the control of said trustees. In case they do not publish the said essay or paper, it shall be the property of the College of Physicians of Philadelphia."

The prize is open for competition to the whole world, but the essay must be the production of a single person.

The essay, which must be written in the English language, or if in a foreign language, accompanied by an English translation, must be sent to the College of Physicians of Philadelphia, Pennsylvania, U. S. A., before January 1, 1901, addressed to Richard C. Norris, M. D., Chairman of the William F. Jenks Prize Committee.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year.

The committee reserves the right not to make an award if no essay submitted is considered worthy of the prize.

JAMES V. INGHAM, M. D., *Secretary of the Trustees.*

June 15, 1899.

A CANDY INVESTIGATION.—An analysis was recently made by the board of health of nearly two thousand samples of candy of all kinds, purchased at different stores in the city, but chiefly from street stands and little shops in the vicinity of the public schools. According to the report, none of the samples submitted contained any insoluble or harmful materials. The chief ingredients of the cheaper grades of candy were found to be starch, sweet gum, and glucose.—*Medical Record.*

QUININ CONSUMED BY AMERICANS.—The report comes from Washington that 125,000,000 grains of quinin have been consumed during the past year by American soldiers in Cuba, Puerto Rico, and the Philippines. It is stated also that Americans generally are a race of quinin-eaters, consuming as they do one third of the quinin of the world. The drug is used in the preparation of many patent medicines, tonics, bitters, cold cures, etc., and is dissolved in rum or spirits for external use as a hair-tonic.—*Medical News.*

ANESTHETICS AND URINARY SECRETION.—Prof. W. H. Thompson made a preliminary communication on this subject before the Royal Academy of Medicine of Ireland, of which the following is a brief summary: (1) A mixture of ether and chloroform (2 to 1) did not cause an increased diuresis. This was the anesthetic used in his sodium-chloride research. Six experiments were performed on dogs. (2) A.C.E. mixture, on the contrary, did in most cases markedly increase the amount of urine. In one

case suppression was caused. This dog proved to have albuminuria. (3) Ether also produced an increase of urine, as did chloroform likewise, but with this latter anesthetic only one experiment has so far been carried out. (4) Little or no effect was produced by the various anesthetics on the total output of nitrogen and of urea, even in cases in which marked diuresis was caused. (5) The after-effect on the output of chlorides showed a marked diminution. What the immediate effect was has not so far been definitely decided. (6) In eight experiments (with different anesthetics) the urine was examined for carbohydrates with chloride of phenyl hydrazin and sodium acetate. All but one gave crystals. Some of these were undoubtedly glucosazone, others glycuronic acid, while in one case it is probable the crystals were those of galactosazone. In all cases the dogs were injected with a solution of morphine.—*The Medical Press.*

VULVITIS IN CHILDREN.—Dr. Drummond Robinson, before the Obstetrical Society of London, which met January 4th, reported the results of his investigation of fifty cases of vulvitis in children, in seventy-six per cent of which were found cocci similar to the gonococcus of Neisser. Dr. Handfield Jones found it difficult to believe that over seventy per cent of all vulvar discharges in children depended on gonorrheal infection. The following points seemed to him to render the gonorrheal theory doubtful: (1) The disease had not spread to neighboring tissues; (2) it was readily cured; (3) the inguinal glands were rarely enlarged; (4) the disease was common in delicate, rare in robust children; (5) in undoubted infection during rape the disease was much more severe than in ordinary cases of vulvitis.—*Medical Record.*

ADDISON'S DISEASE DURING CHILDHOOD.—Dezirot (*Journal de Medicine*, August 28, 1898) has collected records of forty-eight cases of Addison's disease occurring during childhood, thus indicating that the infection is hardly so uncommon in that period of life as has been supposed. The youngest child was aged seven days, the eldest fourteen and a half years. The infection, which is almost invariably due to tuberculosis, is usually first manifested by very vague symptoms, such as weakness, anemia, loss of weight, gastro-intestinal symptoms, nausea, vomiting, diarrhea. Pain and pigmentation are quite uncommon in children. Convulsions are usual, intermissions frequently occur, and the disease pursues a more rapid course than in adults. Extract of suprarenal gland yields fair results in the treatment.—*The University Medical Magazine.*

BRITISH MEDICAL FORTUNES.—The *Lancet* corrects an impression which seems to have existed in England to the effect that Sir William Jenner's fortune of £375,000 was earned by him in the practice of his profession. As a matter of fact, a certain portion of this fortune was derived from trade and bequeathed to him by a brother. The *Lancet* names the fortunes left by eleven eminent English physicians, and considers that a

first-class brewer's fortune would be expected to amount to more than the aggregate total of these eleven medical fortunes, or the brewer would be accounted a comparative failure.—*Medical News.*

REPORT CONCERNING "EMBALMED" BEEF.—The report of the Army Beef Court of Inquiry, appointed to investigate General Miles' charges regarding the food-supply of the army in the late war, was made public on May 7th. It finds that General Miles' statements concerning refrigerated beef are not sustained, and that the canned beef was good and fresh when delivered. The canned beef is considered, however, unsuitable for use as a field ration. General Miles is criticized for not promptly reporting to the Secretary of War his knowledge or belief that the food was unfit and caused sickness. General Eagan was sharply criticized for purchasing such large quantities of canned beef as he did. It is recommended that no further proceedings be held.—*Ibid.*

REMOVAL OF FOREIGN BODIES FROM THE FEMALE BLADDER.—Picque (*Bulletins et Memoires de la Societe de Chirurgie*, No. 28, 1899) in a report of a case in which Rochard successfully removed a hairpin from the bladder of a girl, aged fourteen, by the suprapubic method, states that in dealing with foreign bodies in the bladder it is admissible not to attempt extraction by the urethra if the body be a large one or can not be crushed, and also if it be irregular in shape and pointed. Such attempts are usually unsuccessful and sometimes dangerous. If a cutting operation be indicated, the bladder, in a very large majority of cases, should be approached from the vagina. Suprapubic cystotomy may, however, be required, especially in young girls with a narrow vagina and intact hymen, and also in cases in which the foreign body is known to be large, but concerning the nature and form of which no trustworthy information can be obtained. The operation is recommended as much almost for exploratory as for therapeutical purposes. The cystoscope is very useful in many cases of foreign body in the bladder, but fails when illumination is prevented by the large size of the body or by contraction of the vesical cavity.—*British Medical Journal.*

RED LIGHT AS A THERAPEUTIC AGENT.—In our conscious superiority to our forefathers we have been used to look with contempt on their practice of treating cases of smallpox by means of red light in the form of red blinds, curtains, and coverlets, but with our present knowledge of the chemical and physical action of the different rays of the spectrum and the influence of light and darkness on life in its highest and lowest manifestations we may have felt a suspicion that, whatever the theory of the medieval physicians, their practice may have had a scientific basis. In the last number of the *Zeitschrift für Krankenpflege* we find that it has been tried, and apparently with remarkable results, in the treatment of measles. A child, eight years of age, having sickened with an attack of measles of more than usual severity, was on the second day brought under the influence

of the rays of least refrangibility, the windows being fitted with red blinds, and a photographer's lamp with an orange-yellow globe being used for artificial light. In three hours the rash had disappeared, the fever had subsided, and the child was playing cheerfully, complaining only of want of light. The blinds were consequently removed, when three hours later the medical man was summoned to find that the eruption and fever had returned, and the child was weak and prostrate. The red light having been resumed, the rash disappeared in a little over two hours, as did the fever, this time permanently. In two more days the cough had ceased, and the child was well in every respect. The brother and sister and a fourth patient infected from the first case were treated in the same way and with like success. In the great epidemic of smallpox in 1871-72 some cases were reported as having been kept in dark rooms with great benefit, especially as regards the pustulation and pitting. Clearly what virtue there may be in this method lies in the exclusion of actinic rays, and the substitution of red or orange light for total darkness has obvious advantages as, in the case of photographic manipulations.—*Lancet*.

ATROPHIC GASTRIC CATARRH.—Reichmann (*Berl. klin. Woch.*, November 14, 1898) refers to cases in which there is discomfort in the abdomen, nausea, and regurgitation of a watery fluid. These symptoms come on in attacks rarely immediately after food, often in the night, and they recur every day, or more frequently every other day, or very seldom at long intervals. The nausea is never very pronounced, and it outlasts the other symptoms. The discomfort is felt in the upper part of the abdomen, and most often in the neighborhood of the umbilicus. The regurgitation takes place once or more frequently, some 50 to 60 c.cm. being brought up. The fluid looks like turbid water, but is quite translucent on infiltration. It is generally frothy. It has a raw, salty taste, but no smell. The fluid is alkaline, and contains no ptyalin or pepsin, so that it will not digest starchy or nitrogenous matters. The chemical examination would make it appear to consist of a watery secretion of the mucous membrane. These patients are obviously suffering from a complete suppression of the gastric juice (achylia gastrica), so that gastric digestion is in abeyance. This absence of gastric secretion occurs in carcinoma of the stomach, atrophy of the mucous membrane, and secretory gastric neuroses. In the ten cases referred to by the author the permanent absence of the gastric juice and the long duration of the affection (one to nine years) excluded secretory neuroses or malignant disease. Thus the author looks upon this group of symptoms as undoubtedly in favor of gastritis atrophicans, but the absence of them does not exclude this affection.—*British Medical Journal*.

NEPHRO-TYPHOID.—J. C. Wilson records the case (*Amer. Journ. Med. Sciences*, December, 1898) of a lad, aged nineteen, of previously good health, and without history of typhoid, but who developed headache and pyrexia, the temperature fluctuating between 102° and 104°. The urine

varied in specific gravity from 1010 to 1030, and contained a large quantity of albumen with epithelial and granular casts. There were delirium, vomiting, and slight puffiness under the eyes. There was also some passage of blood per rectum. There were no rose spots nor enlargement of the spleen, but Widal's reaction was markedly present. In about six weeks the urine was free from albumen, though still containing a few cells, and the temperature had come down to 99.3°. There was then a return of pyrexia with delirium, reappearance of albuminuria with epithelial and granular casts and blood corpuscles, and a rather copious eruption of typical enteric spots appeared. There was enlargement of the spleen, and the patient suffered from diarrhea. He subsequently made a good recovery. The writer looks upon this case as distinctly one of enteric fever, though obscure in its diagnosis at first; in this particular instance the kidneys bore the chief brunt of the disease. The case even showed a typical relapse, with reappearance of the kidney lesion. He points out the extreme importance of diagnosis in a case such as this, for if unrecognized it may be the source of danger to others; and in the event of a diagnosis of nephritis only being made, it is conceivable that a patient might have articles of food, such as grapes, etc., given to him which might prove extremely injurious. Under these circumstances it would be better to diagnose the case as typhoid, and overlook the nephritis, rather than the converse. The writer also quotes another case seen in consultation, in which acute nephritis was present, but the enlargement of the spleen, diarrhea, and condition of the tongue were the symptoms that first attracted attention, and pointed to the diagnosis of typhoid. In this case, as in the earlier history of that already mentioned, there was no eruption. Widal's reaction seemed to be negative. Wilson is of opinion that notwithstanding this fact the case was one of typhoid with acute nephritis.—*Ibid.*

THE VISIBLE OUTLINES OF THE STOMACH AND INTESTINES.—Stern (*Centralbl. f. inn. Med.*, October 29, 1898) confirms the view expressed by Pichler as to the possibility of seeing the outlines of these organs in respiration. He holds, however, that Pichler underestimates the value of this phenomenon from a diagnostic point of view. Stern contends that in cases of gastroptosis the movement of the smaller curvature of the stomach is visible even in cases where there is no marked wasting. The patient must lie in the horizontal position, and the light must be good. The abdominal walls must not be too thick or too tense, and the stomach and intestines must be at least partially full. The outlines of these organs are naturally less frequently seen than the diaphragm phenomenon, yet they are worthy of attention.—*Ibid.*

TREATMENT OF INDOLENT ULCERS.—Marcuse (*Deut. med. Zeit.*, No. 63, 1898) describes a method of treatment for troublesome ulcers of the leg which he has found more efficacious than elastic bandages or sticking-plaster. Unna's zinc glycerine glue has a remarkable power of restoring the disordered circulation of the surrounding tissues, and thus aiding in the

healing of the ulcers. There are many cases, however, in which Unna's treatment by itself is of no avail. Among these are the large ulcers which have been neglected for a long time and are constantly pouring out a copious secretion. Another variety is the callous ulcer with sharp indurated edges. In order to stop the secretion and improve the vascularity of the ulcer, and particularly the neighboring tissues, the author has found that the application of wet bandages moistened with Burrow's solution, and subsequently followed by the zinc glycerine glue, has an excellent effect. The composition of the solution is as follows: Alum, pulv., 5.0; plumb. acet., 25.0; aq. distil. 500.0. A more convenient form for use in general practice would be: Alum, 10 parts; plumb. acet., 50 parts; both powders to be well mixed in a liter of water. The application of this lotion is found to have an astringent action on the ulcer without causing dryness. It is antiseptic, and lessens tension and pain. The moist warmth in the case of the callous ulcer has a powerful effect in lessening the induration and improving the general vascularity of the part. The patient should be kept in bed for some weeks. The method of application consists in cutting a large piece of ordinary gauze dressing, so that the skin for several inches round the ulcer is covered. The gauze is moistened with the lotion and then applied, the whole being covered with gutta-percha tissue. After a short time sulphate of lead is precipitated.—*Ibid.*

THE THYROID TREATMENT IN OBESITY.—Ebstein (*Deut. med. Woch.*, January 14, 1899) concludes a paper on this subject in which details of 7 cases are given. He never observed any unpleasant effects from the doses used in these cases. As all individuals do not react in the same way to thyroid feeding, small doses must be given at first. After excluding for special reasons 2 of the 7 cases, Ebstein says that in 2 of the remaining 5 there was no loss of weight. In 1 of these cases the lad, aged 17, had shown a tendency to obesity very early, and the author observes that in such cases dietetic treatment also meets with many difficulties. In the second case, that of a man, aged 49, 0.6 gram thyroid gland was taken daily for eight days without any effect. Usually with this dose a diminution in the weight is observed. In the other 3 cases the loss of weight was soon noted. In 1 case in a very fat woman, aged 31, the patient lost 6.5 lbs. in the first week, and 1.5 in the second, but in the third week she gained 1 lb., and then considerable variations were noted. The loss of weight is not due to diuresis. It can not yet be stated that thyroid feeding is an efficient "anti-fat" treatment. According to Ebstein's opinion, the obese must get rid of superfluous fat by a rational dietetic treatment and suitable habits of life. He thinks that thyroid treatment should be abandoned as an "anti-fat" cure. The harmful effects consist in palpitation, vertigo, anxious feelings, glycosuria, etc. The author maintains that (1) the thyroid treatment of obesity is unsatisfactory; (2) the treatment is not a rational one; and (3) there are methods of treating obesity without it. Finally, the author warns against the thyroid treatment in obesity without medical advice.—*Ibid.*

Special Notices.

"ROBINSON'S LIME JUICE AND PEPSIN" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. See advertisement in this issue. See remarks on their Arom. Fluid Pepsin also.

SANMETTO IN ALL FORMS OF VESICAL DISEASE.—I have found the preparation known as Sanmetto a most excellent remedy in all forms of vesical diseases that have come under my observation, especially the cystitis attendant on the presence of stone before and after its removal, and also the vesical tenesmus from colds and urethral inflammation, both specific and non-specific.

JOHN R. PAPIN, M. D.

St. Louis, Mo.

SIGHT-SEER'S HEADACHE.—There are, no doubt, very many important uses for antikamnia, of which physicians as a rule may be uninformed. A five-grain antikamnia tablet prescribed for patients before starting on an outing, and this includes tourists, picnickers, bicyclers, and in fact anybody who is out in the sun and air all day, will entirely prevent that demoralizing headache which frequently mars the pleasure of such an occasion. This applies equally to women on shopping tours, and especially to those who invariably come home cross and out of sorts, with a wretched "sight-seer's headache." The nervous headache and irritable condition of the busy business man is prevented by the timely use of a ten-grain dose. Every bicycle rider, after a hard run, should take two five-grain tablets on going to bed. In the morning he will awake minus the usual muscular pains, aches, and soreness. As a cure and preventive of the pains peculiar to women at time of period, antikamnia is unequalled and unaccompanied by habit or unpleasant after-effect. If the pain is over the lower border of the liver, or lower part of the stomach, or in short, be it headache, sideache, backache, or pain of any other description caused by suppressed or irregular menstruation, it will yield to two five-grain tablets. This dose may be repeated in an hour or two if needed.

In view of the prevalence of diarrheal affections at this time of the year, the following formula will prove of interest. Dr. G. Joachim (Archives of Pediatrics, July, 1899), recommends:

R Tannopine, ... gr. 5 to 7;
Calomel, ... gr. $\frac{1}{2}$.

Sig: To be taken in one dose, three to four powders daily.

This medication proved of great value in fifty-one cases of acute intestinal or gastro-intestinal catarrhs.

Dr. G. C. H. Meyer (New York Medical Journal) advises the following mixture in cases of dysenteric diarrhea in children:

R Castor oil, ... 8 to 10 minims;
Powdered gum arabic, enough to make an emulsion;
Tannopine, ... 4 grains;
Camphorated tincture of opium, ... 10 minims;
Peppermint water, enough to make 1 drachm.

Sig: This amount to be taken every two hours.

The author also speaks very favorably of a mixture of bismuth, tannopine, and Dover's powder for the treatment of chronic forms of diarrhea in adults where the stools are fluid and more frequent than natural.

THE AMERICAN PRACTITIONER AND NEWS.

"NEC TENUI PENNÂ."

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No. 4.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

TREATMENT OF LOBAR PNEUMONIA.*

BY JOHN G. CECIL, M. D., B. S.

Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Louisville Medical College, etc.

A more correct title for this paper would be "The Treatment of a Patient Suffering from Lobar Pneumonia." Since the classification of lobar pneumonia as an infectious disease and since no specific treatment has yet been devised, it is hardly proper to speak of treating pneumonia. It is in the nature of this disease to run a definite course practically uninfluenced by any treatment; accordingly, the sooner our therapeutics is raised to the level of our pathology the better it will be for the patient. Notwithstanding the truth of the foregoing statement, it must not be inferred that nothing is to be done; on the contrary, there is very much that may be done; only let our attention be directed to the patient and not to the disease. While the course and termination may be regarded as fixed, the conditions existing at the time of attack will certainly modify them in a most decided manner.

"In the treatment of pneumonia it is essential to recognize that, though the disease may be a unit from a pathological point of view, therapeutically it comprises essentially diverse diseases.

"A pneumonia whose physical signs can not be made out in the beginning, but gradually creeps up towards the chest wall; a pneumonia whose expectoration is in the beginning prune-juice, whose

*Read at the meeting of the Kentucky State Medical Society, May 18, 1899.

crepitant râle is never typical, whose physical signs are obscure until complete consolidation gives percussion dullness; or a pneumonia occurring in the alcoholic, in the old, in the victim of renal disease, in the broken-down debauchee, in the wornout city merchant or professional man, is in its management essentially distinct from a pneumonia the result of exposure of a strong, healthy countryman to a Western blizzard or other cold.

"In one form of pneumonia sedative treatment may kill the patient; in another form sedative treatment at the beginning of the attack may be necessary for the saving of the patient." (Wood & Fitz.)

Attention will be asked first to the sthenic type of the disease.

In the young healthy individual the management of pneumonia resolves itself practically into making the patient as comfortable as circumstances will admit of. A good purgative dose of calomel to start with will anticipate and prevent much subsequent discomfort.

For pain, which varies according to the extent of pleurisy, small doses of morphine, or its equivalent in other preparations of opium, will afford the surest and safest relief. The objections to the use of opium in lobular pneumonia and in the asthenic type of lobar pneumonia does not hold in the management of the variety of pneumonia now under consideration. Opium not only quiets pain, but it allays the cough which is often harassing and never of much benefit. A very small proportion of the fibrinous exudate is disposed of by cough and expectoration. There is therefore no danger of seriously interfering with excretion through this source. The small dose of morphine tranquilizes the patient, gives rest and sleep, does not interfere with the progress of the disease, and answers every purpose of a cough medicine. A single dose of one-eighth grain of morphine given at bedtime is generally sufficient. Pain is also combated in a successful way by the use of the ice-bag, which is a great improvement on the time honored hot poultice.

The fever of pneumonia, even when it rises to 104° or 105° , is not necessarily such a bad indication; it demonstrates a resistance that is very desirable and very essential to successful issue. The course of this fever is short, and, even though a high grade is maintained, it need not be fought with the same zeal that fevers of longer duration demand. The ice-bag to the affected side exerts a good influence in reducing temperature as well as in relieving pain.

Hyperpyrexia can be controlled by cold sponging or the cold pack. The coal-tar derivatives have no place in the management of this or any other kind of pneumonia. *Veratrum viride*, aconite, and phlebotomy are indicated in just such cases as demand no treatment at all; consequently can hardly claim a place in the therapeutics of pneumonia. Their action is to depress the heart; certainly no specific action can be claimed for them. If lessening blood-pressure by their use is the intention, we have better and safer means at our command.

The pathological condition confronting us is certainly not materially altered by slowing the pulse. If the heart maintains a steady ratio to the height of fever, neither heart-tonics, stimulants nor sedatives are very essential. Should, however, a tendency to heart-failure, first generally shown by loss of accent to the second sound, manifest itself, the indication for tonics and stimulants is plain, and they should be exhibited for effect regardless of dose. A heart-action that gains in rapidity day by day, independent of variations of temperature, is of serious import and should awaken the most active resistance. The key to the successful management of pneumonia lies in the wise and judicious adjustment of therapeutic agents to meet a progressively failing heart. Of all agents for this purpose whisky and strychnine are the most reliable. Strychnine should always be given hypodermatically, the dose repeated every three or four hours; should vary from one-sixtieth grain to one-tenth grain; the effect alone should determine the size and frequency of the dose. Whisky is best administered without sugar in plain or aerated water, one, two, or three hours intervening between doses. In nitro-glycerine as a diffusible stimulant and adjunct to whisky we have a valuable agent. It enables us often to tide the patient over a critical period. Much distrust as to its value has arisen from unreliable preparations. Its action is rapid; its effects quickly disappear. The dose should therefore be quickly repeated.

Digitalis is inferior to strychnine as a heart- tonic; the overburdened heart is more certainly relieved by dilating the peripheral capillaries and inviting the blood into them. This is what is done with whisky and nitro-glycerine.

In cases of extensive involvement of the aerating space with marked cyanosis we have in oxygen gas a remedy of great usefulness; its administration will help to carry many a one over a rough place and enable him to reach and pass in safety the crisis. The use of it should

not be delayed too long, nor should the apparent hopelessness of the case ever be used as an argument against it.

The feeding of a pneumonic patient is of no little importance; he is far more likely to be overfed than to be underfed. These patients are seldom, if ever, hungry; more often they have no appetite at all, consequently digestion will be a very uncertain problem.

Indigestion resulting from forced feeding favors the accumulation of flatus in stomach and bowels, which, in turn, embarrasses the heart and lungs in their action. Meat broths and milk with aerated waters should constitute the regimen. Solid food, egg-nog, and milk punch are not desirable, and should be forbidden. There is no danger of starvation in the short course of this fever, and little can be done to maintain strength by giving of food during its activity.

A word as to examinations of the patient. Having made the diagnosis, frequent examinations during the progress of the case are both unnecessary and injurious. To turn the patient over is annoying and painful; to raise him to a sitting posture is dangerous and needless. The course and progress of the disease can be determined without daily or bi-daily examinations, and even though new areas are being invaded, the management will hardly be varied. The heart's action, the rapidity of respiration, and the distribution of pain will usually give all necessary information without frequently repeated examinations.

The management of lobar pneumonia in the healthy and robust resolves itself into practically a do-nothing policy; make the patient comfortable, relieve pain and cough with an opiate and the ice-bag, sponge with cold water for excess of fever, do not force the feeding, and do not harass by frequent examinations. Watch the heart with jealous care, and be ever ready with tonics and stimulants at the first sign of failure. For delirium and sleeplessness apply cold to the head. Do not overfeed; do not overtreat; do not meddle.

The management of pneumonia in the aged, diseased, or dissipated is an entirely different proposition; the fight begins with the initial symptoms of the attack, and every energy is bent in sustaining the already crippled heart. The policy must be prompt, active, and alert. To guide these patients over the crisis calls for the most constant and watchful care, and will tax to the limit the skill of the therapist. No disease requires more skill and attention in the nursing, and the services of at least two faithful and skillful nurses will be demanded. A successful issue in such a contest is a feat to be proud of, and one

scarcely equaled, never surpassed, in the realms of medicine and surgery.

The chief aim in the management of such cases will be to sustain the heart; the agents at our command are practically identical with those used in the threatened heart-failure of sthenic cases. Opiates may be necessary to relieve pain, but its administration and dosage must be most wisely adjusted. Small doses of morphine repeated as the occasion may demand will be safest and most efficient.

It is only when fever is excessive that it requires any attention whatever. Much oftener will it be found that the temperature will be comparatively low, indicating a lack of resistance, a very unfavorable indication. The application of cold in any form as a rule is not well borne, and other antipyretics are out of the question.

Delirium, which is very constantly present, is best met by the use of stimulants, as brandy, whisky, or caffeine. No medicine of depressing character is at all admissible.

Strychnine, digitalis, nitro-glycerine, strophanthin, cocaine, and atropine comprize the medicinal agents for combating heart-failure. They should be given solely by the needle. Their administration should be determined by the effect, and should be under the immediate supervision and direction of the physician himself.

The whole question of feeding is of secondary importance; it is better to leave off food of all kinds and preserve the stomach in its integrity for such stimulants as whisky and brandy. The amount of whisky which may, with advantage, be given will be largely determined by the ability of the stomach to digest it. Oxygen gas will often prove of incalculable benefit; it should be used early and persisted in until the last ray of hope is gone.

After all, and in the face of all efforts, let them be never so prompt, never so wise, never so assiduous, pneumonia in this class of patients will ever remain the most destructive and deadly of all common acute diseases, and the winner of these hard-fought battles may be justly entitled a wise and good physician.

LOUISVILLE.

HERNIA AND ITS OPERATIVE TREATMENT.*

BY J. L. JOHNSON, M. D.

Author of Johnson's Technique of Operative Surgery; Lecturer on Surgical Anatomy, Kentucky School of Medicine, and President of the Louisville Society of Medicine.

It shall not be my purpose to enter into details as regards the different varieties of hernia, but simply to speak of the most prevalent forms of this one of the most common of all human ailments.

In speaking of hernia, however, it is generally understood to mean inguinal, either oblique or direct. It is, therefore, principally to this form we shall confine our remarks.

The scope of this paper will not permit me to enter into the etiology, pathology, or anatomy of hernia, except in so far that I may make myself understood.

Hernia is both congenital and acquired, and as long as it remains reducible there is comparatively little or no danger to life, but it may become strangulated at any time and without premonitory symptoms. Upon coughing or contraction of the abdominal muscles, and when the patient is in the erect position, the hernia presents itself at one of the hernial orifices in the form of a soft tumor, or swelling.

Hernia, if acquired, may come on suddenly or gradually.

At times an accurate diagnosis, as regards the hernial contents, is very difficult, but this is a matter of minor importance, both in reducible and strangulated hernia, as the treatment should be the same. In all cases of hernia the sensation of weakness of the hernial region and dragging of the parts become more and more apparent to the patient, attended in many cases by functional disturbances of the bowels.

I believe it is the duty of the surgeon to advise operation for the radical cure of hernia in every case between the ages of six and fifty years, when the general health of the patient is otherwise good.

It is immaterial as to the location and contents of the hernial sac; a radical operation should be performed at the surgeon's earliest opportunity. Experience has long since proven that palliative treatment of hernia is in the vast majority of cases only adding fuel to the already increasing flame.

I shall casually refer to the palliative or mechanical treatment, the more forcibly to demonstrate its non-curative properties. This line of treatment should be resorted to only when more radical means are

* Read at the meeting of the Kentucky State Medical Society, May 18, 1899.

refused by the patient. While in some instances it may effect a cure in children with very small herniæ of recent formation, its utility is doubtful, and should be well considered before subjecting the patient to the tortures of an ill-fitting truss, the ball of which invariably chafes the skin, keeping the parts continually irritated, and, in many instances, producing such pressure on the spermatic cord and pampiniform plexus of veins that a varicocele is produced and the hernia unsupported. Aside from this, if the truss fits so tightly as to control the hernia, the pressure of the ball diminishes the nutrition of the abdominal muscles around the abdominal ring to such a degree that they become very much thinned, and in this manner cause an increase in the size of the hernial ring, leaving the patient in a worse condition than prior to the application of the truss.

Taking these objections into consideration, I believe the rare cases curable by the use of the truss should be no barrier to the radical operation in all cases where the physical condition and age of the patient will permit. The necessary and oft-repeated application, removal of, and cleansing of the truss is enough to condemn it.

Frequently patients have come to me who, for an indefinite length of time, have worn a closely-fitting truss over an irreducible hernia. It must be apparent to the most casual observer that the truss could not under such circumstances prove beneficial, but its continual pressure unquestionably does a vast amount of harm by maintaining a congested and engorged condition of the hernial contents, thus increasing the strength of the already existing adhesions and rendering reduction an utter impossibility without an open operation. I shall briefly refer to the injection plan of treatment that I may prove its utter inutility. At the time of injection there is some danger of infecting the patient, and the inflammation of the tissues, produced by the fluid injected rapidly subsiding, leaves the hernial canal more patent than before the beginning of the treatment.

This has been thoroughly demonstrated by W. T. Bull, of New York City. Having operated upon forty consecutive cases by this plan, relieving temporarily all of them, he witnessed the return of the hernia in every case operated upon.

This technique I have only mentioned in order that its worthlessness might be made apparent and justly condemned.

This brings us to another, and to me a more important, phase of this subject, Herniotomy.

"The history of operative procedures for the radical cure of hernia began with Celsus in the first century, and may properly be divided into ancient, medieval, and modern."

Ancient methods began with Celsus in the first century and ended with the dawn of the tenth.

Medieval began with the tenth and ended with the close of the middle ages, at which time all surgical operations were discontinued.

Modern methods began with the discovery of subcutaneous surgery, this having undergone numerous modifications until the present time. It will, perhaps, be of some interest to refer to the work done by Celsus and his contemporaries. "It is to him we are indebted for the origin of operations upon non-strangulated hernia." "He would not operate upon strangulated hernia, and was very conservative in his selection of cases for any hernial operation, operating only upon children between six and fourteen years of age in otherwise perfect physical health and when the rupture was small.

"Many of his rules could scarcely be improved upon to-day. He advised against operation in umbilical hernia in children. His technique was a free incision and exposition of the sac just as we do to-day;" whether he removed the sac is not known, but we believe he did.

"Before the time of Celsus several methods were employed for the cure of umbilical hernia, the principal one being to ligate the sac high up after reduction of its contents. Celsus improved upon this by ligating the sac and cauterizing the stump.

"Oribassius in the fourth century devised some ingenious methods of operation, a number of which are in use at the present day, and are regarded as original." "Paul of Ægina operated in the seventh century very much in the same manner as did Celsus, with the important modification of castration, this remaining one of the steps of herniotomy until all operative procedures for the radical cure of hernia were discarded.

"The middle ages mark the introduction of a large number of variations in the technique of the older operations, the chief of which are the following: Castration, exposure, opening of and ligation of the hernial sac, invagination of the sac and scrotum, and cauterization. In the tenth century the attention of the profession was first directed toward the mechanical treatment of hernia, and with the gradual improvement of the appliances operations were again abandoned and rarely, if ever, spoken of by the regular practitioners.

"Step by step we have now arrived at the period marking modern methods of operating. This was first advocated by Stromeyer in 1831, when he introduced subcutaneous surgery," consisting of the injection plan of treatment to which I have previously referred.

"Gerdy's and Wurtzer's operations may be called the first of the modern operations, the principal of which consisted of invagination of the scrotum within the hernial canal and its permanent fixation there.

"Wood's technique was a combination of both the subcutaneous and open operations, and was extensively employed until the more perfected methods devised soon after the advent of Sir Joseph Lister's aseptic method of wound treatment came so forcibly and prominently before surgeons throughout the civilized world. With the introduction of antiseptic surgery there was a distinct return to ancient methods of operating.

"Lister and Steel taking the lead in this movement were soon followed by the German surgeons," and from here the contagion of radical cure spread with incredible rapidity, until to-day there is not an up-to-date surgeon upon the globe who is not quite familiar with the techniques of Bassini, Macewen, and Halstead.

"In 1876 Czerny published a series of cases upon which he had operated by obliterating the hernial sac and closing the canal with cat-gut sutures.

"The principles upon which modern herniotomy is based are obliteration of the sac and canal and transplantation of the cord.

"Leisrink and Segon have shown by a report of five thousand cases that the mortality from operation as long ago as 1886 was only one and a half per cent.

"Bull and Coley, of the Ruptured and Crippled Hospital, New York, have demonstrated that from two hundred and fifty operations performed by them from December, 1891, to March, 1895, in children under fourteen years of age, the mortality was only three deaths, or one and two tenths per cent, and four relapses. Broca's statistics show that from four hundred and seventy-seven operations only two were fatal, and from two hundred and fifty cases traced, there were only three relapses.

"Broca's technique was high ligation of the sac and obliteration of the canal without transplantation of the cord."

The principal dangers of herniotomy are sepsis and hemorrhage from the loosely ligated sections of the omentum. From sixty to

ninety per cent of patients remain cured, and should the hernia return it is more easily controlled than before operation.

The best results follow operation performed in childhood and youth. Extreme age, except under very urgent circumstances, contra-indicates the operation, the ages from four to fifty being most propitious for this special line of work.

"All methods involving the principle that cicatricial tissue forms a barrier preventing return of the hernia have been wisely abandoned, as the principle is false in theory and no longer justifiable in practice." When the cicatrix yields, it does so very rapidly, and the parts become so thinned that no form of support can be worn with comfort.

Primary union in herniotomy as well as in all other operations must be regarded of first importance; therefore any thing interfering with this must be discarded. Any attempt of the surgeon to close the canal by plugging it with omentum, muscular tissue, or invagination of the sac is unsurgical and fraught with certain failure.

The suture material to be used in this work is of very special importance, and demands the closest scrutiny of the surgeon. The failure of many former operations was perhaps due to too early absorption of sutures employed before union had taken place. The tissues here being principally of a fibrous nature, naturally required longer for healing than those with a more abundant blood-supply.

I shall not enter into a description of the various materials employed for these sutures, but speak briefly of those preferred in surgical work of the present time. Kangaroo tendon, introduced by Marcy, as yet wields the palm of efficiency. When properly prepared it is said to remain unabsorbed in the tissues from two to three months, and has proven, as previously remarked, to surpass all other suture material for this special line of work, although chromicised catgut is an admirable substitute.

Silk, silkworm gut, and silver wire are not to be considered for obvious reasons, with which you are no doubt quite familiar.

To the present time herniotomy, according to Bassini's technique, has given by far the most satisfactory results. It has withstood the test of eleven years by its originator and for eight years by the profession at large.

Bull and Coley have operated upon some eight hundred cases by Bassini's method, with a mortality of one per cent, and two per cent of relapses.

Halstead's method in its essential features closely resembles Bassini's, the chief difference being ligation of most of the pampiniform plexus of veins and transplantation of the cord outside the external oblique muscle, instead of internal to it, as in Bassini's operation.

This modification does not possess any advantages over Bassini's technique, and is not to be preferred, only in perhaps very exceptional cases.

Macewen claims two very important advantages for his operation, which he demonstrated very satisfactorily to me while in attendance upon his clinics in Glasgow, Scotland. The points to which I refer are as follows: He does not ligate the sac, but quilts it up, beginning at the distal end (having first opened it) and continuing up to the internal abdominal ring, when the needle is passed through the internal ring and out through the abdominal muscles, drawing the puckered sac well up inside the internal abdominal ring. A stitch is then taken in the external oblique muscle and the sac snugly anchored in its new position, completely plugging the hernial outlet; again, he does not incise the fibers of the external oblique muscle, thus maintaining the original strength of the belly wall, but with a blunt needle sews the conjoined tendon to Poupart's ligament with from two to three mattress sutures, the cord being held aside with the finger or a strip of gauze, just as in Bassini's operation, until its new bed is prepared. Dr. Macewen informed me personally he had published literature upon his operation in 1876, and was quite sure Bassini had infringed upon his technique, and claimed the operation, which has become so popular, as his own.

In all cases of strangulated hernia, observed early or late, a radical operation is demanded, and the earlier the better, before much taxis or manipulation has been practiced for its reduction.

If under anesthesia a hernia can not be reduced in a very few minutes, taxis should be discontinued and the patient quickly prepared for operation. If the case is a severe one and the symptoms of a grave character of more than twelve hours' duration, taxis should not be employed, as by so doing the gut may be ruptured, causing an extravasation of feces into the peritoneal cavity, after which general peritonitis and death supervene. The gut may be so completely constricted from the beginning that gangrene will be present at the end of a few hours, consequently the necessity of exercising great care when employing taxis. During the process of operation, if the intestine is found to be gangrenous and resection is necessary, it may be done with compara-

tive ease and safety according to my own technique, with which I hope you are quite familiar.

After the reduction of a strangulated hernia, the operation for radical cure should proceed as in ordinary cases, the strangulation proving no disadvantage so far as the cure is concerned. If the omentum contained in a hernial sac is small in amount and is perfectly healthy, it is simply returned to the peritoneal cavity.

If present in large quantities, it should be drawn down and ligated in sections, care being exercised not to tie too close to the bowel. All that portion to the distal side of the ligature is cut away and the stump returned to the peritoneal cavity.

Now, the salient points of Macewen's and Halstead's operations having been presented, begging your indulgence for personal allusion, I shall in the briefest manner possible give Bassini's technique of herniotomy as described in my Pocket Manual on the Technique of Operative Surgery.

First: Make an incision from the spine of the pubis one inch to the inner side of and parallel to Poupart's ligament, from four to six inches in length, through the skin and superficial fascia to the aponeurosis of the external oblique muscle, and with the fingers bluntly dissect the skin and fascia back, exposing the external oblique muscle and external abdominal ring.

Second: Pass a grooved director through the external abdominal ring just beneath the aponeurosis of the external oblique muscle, and split it up for three inches, exposing the cord, sac, and edges of the internal oblique and transversalis muscles, which unite and form the conjoined tendon. The arching fibers of the muscles pass over the cord and form the deep ring.

Third: Dissect the aponeurosis of the external oblique freely loose with the fingers from the internal oblique muscle. Have the assistant retract the edges of the wound well, including the aponeurosis of the external oblique. Pass the finger beneath the cord and sac and separate them, *en masse*, freely loose from the canal.

Fourth: Dissect the sac loose from the cord, beginning at the upper end. This dissection is very much facilitated by holding the parts between the operator and the light, thus enabling the surgeon to separate the sac from the cord to a much better advantage. When the fingers are worked between the sac and the cord, the remainder of the separation is comparatively easy. I have repeatedly been compelled

to open the sac before I could separate it from the cord, so obscure was their union.

Fifth: The conjoined tendon is bluntly dissected loose with the fingers from the peritoneum and surrounding parts, so that its edge will lap freely over Poupart's ligament. This relieves the tension.

Sixth: The sac must be opened in all cases. If it contains omentum, it is ligated in sections high up and cut off. If it contains the bowel, it must be returned to the abdominal cavity and the sac ligated very high up over the end of the finger in the sac, to prevent tying off a knuckle of the gut. The sac is cut off to the distal side of the ligature and dropped back. The purse-string suture is employed by Gerster, of New York City. It is carried completely around the upper end of the sac, tied and cut off over the end of the finger. The sac is then cut off to the distal side of the ligature and dropped back. This prevents sloughing, as portions of the sac are not included in the ligature.

Seventh: After having trimmed off the fat from the edges of the conjoined tendon, a strip of sterile gauze is passed beneath the cord, which is held aside by an assistant. Sutures of either kangaroo tendon or chromicised catgut, five or six in number, are introduced from within outward before any of them are tied. A curved needle armed with the suture is passed three fourths of an inch from the edge of and through the conjoined tendon from above downward. Then, guarding the femoral vessels with the finger of the left hand, the needle is passed through the deep, tense portion of Poupart's ligament. The sutures should only be one fourth of an inch apart, and should be tied only tight enough to perfectly coaptate the parts. Great care is taken not to constrict the cord at its upper end.

Eighth: Place upon this newly formed rear wall the cord, and over it sew with continuous catgut suture the aponeurosis of the external oblique, taking care not to constrict the cord at the lower end.

Ninth: The skin is closed with continuous or interrupted sutures, as the surgeon prefers, the scar painted over with iodoform collodion and dressed with a dry, sterile dressing of gauze, cotton, and bandage. Apply tightly and allow the dressing to remain ten days, unless complications arise demanding its removal. The patient should remain in bed four weeks, and should be ordered to support the scar with the hand when coughing or straining from any cause. Bassini, the originator of this operation, uses silk sutures throughout his work.

LOUISVILLE.

SOME CASES IN COUNTRY SURGERY.*

BY CHAS. W. AITKEN, M. D.

While surgical cases in the country do not differ from such cases in the cities, yet I am led to use this title for a brief report of cases that have come under my observation as a country practitioner during the past few months. The expectant plan of treatment in surgical cases is gradually giving way to the more advanced practice of doing surgery when it is deemed advisable; the progress, however, is slow.

Our section of Kentucky has suffered from the fact that some of the best surgeons in our State, as well as in adjoining States, have had fatal terminations in most of the cases that have been referred to them for operative work; so that the laity now invariably refer to these facts when an operation is advised, and it is with much difficulty that a consent is obtained to do, or to have done, any thing of sufficient importance to be dignified as an operation. It is a source of regret that these objections raised by the laity are, to a considerable extent, encouraged by so-called conservative physicians.

It has been my painful experience to see many fatal terminations in cases of sickness where a recovery to health might have resulted from early, judicious operative work. During the past few months, of the cases I have operated upon, I deem the following for some reason or reasons as worthy of report:

CASE I. Miss M., aged eighteen years, was taken suddenly ill Thursday night with severe colicky pains. Salts were administered and good purgative action resulted on the following two days; she also had more or less continuous vomiting. I saw this patient first on Saturday evening, forty-eight hours after the initiatory symptoms; she was still suffering severe pains in the abdomen, marked tenderness in vermiform appendicular region, quick pulse, temperature 103° ; I advised appendicotomy. The patient being a visitor in our county, she desired to communicate with her relatives at home, so the operation was postponed until early Monday morning, eighty-four hours after the first symptoms of the attack.

At that time her condition was as follows: Nausea and vomiting, general abdominal tenderness, though more marked over the appendix, pulse 152, temperature 102.2° , respiration 38, abdomen tense. Upon opening the abdomen the appendix was found to be gangrenous, and for at least one and a half inches from its cecal attachment it was

* Read at the meeting of the Kentucky State Medical Society, May 18, 1899.

free in the abdominal cavity, but from that point to its free end it was bound down and fairly well walled off from the free peritoneal cavity by light adhesions. The peritoneal cavity was well protected with gauze sponges, the appendix was carefully freed from its mesentery and adhesions, a silk ligature was placed at the most healthy looking part near the gut, and the division made; the stump was thoroughly cleansed, and carbolic acid was applied.

The exciting cause of the attack was found to be three good-sized chestnut kernels. The wound was dried thoroughly with gauze sponges, and the cavity was protected by packing around the stump with iodoform gauze. This packing was left in position for twenty-four hours, when it was removed and the free cavity was well walled off except at the lowest point. After leaving another packing for twenty-four hours the walling off was perfected; from that time the dressing consisted in washing the wound once daily with hot sterile water, and in packing it lightly with gauze for protection and drainage purposes.

On the third day after the operation the patient developed pyemic symptoms, which became alarming after twenty-four hours. A search was made for the pus, and it was found walled off by adhesions fully one and a half inches above the upper point of incision; this cavity was cleaned out, thoroughly irrigated, and lightly packed with gauze. The whole wound was continuously dressed in this way until it healed. The patient made a good recovery.

The points interesting to me in this case were the gangrenous part of the appendix, a part of which was still free in the abdominal cavity, and the pyemic condition which followed in a few days.

The next case to which I desire to refer is as follows:

CASE 2. Mrs. F., aged thirty-six years, gave history of gall-stone colic for four years. She had found gall-stones in the alimentary evacuations after these attacks several times. Under protracted medical treatment the patient seemed to improve, and for a period of a year she had not suffered pain. I saw the patient some months before an operation was agreed to, and in consultation a diagnosis of malignant disease of pylorus and duodenum as well as gall-stones was made. An exploratory operation was advised; this was not agreed to for three or four months; by this time, however, the gall-bladder had become so distended that the patient asked for any thing for relief. A laparotomy was done, the gall-bladder was found enormously distended, and over

sixteen ounces of biliary material was removed, but not a gall-stone was found in the bladder or ducts. The obstruction was due to the malignant growth which had been previously diagnosed. The abdomen was closed with silkworm gut; primary union took place, and the patient was up after two weeks, though only to look forward to suffering and death from cancer. She lived a few months, and died of starvation. The emptying of the gall-bladder, however, gave her considerable relief.

We expected to find the malignant condition which was present, and about as fully confident did we expect to find gall-stones, which were not present. Fortunately an unfavorable prognosis was given before the operation.

The third case I desire to report was referred to me by my friend, Dr. Winter, of Hillsboro, Ky.:

CASE 3. Mr. P., aged eighteen years, suffered from earache accompanied by a purulent discharge from the left ear for two months; for two weeks before I saw him—December 27, 1898—he began to develop septic symptoms, and for the week following his first visit to my office he had an average daily temperature of 102° F., persistent headache, a continual fetid discharge from the ear, locomotion so impaired that he was compelled to keep quiet, and a general tenderness around the ear, more especially over the mastoid cells. He consented to an operation. The incision was made as usual over the mastoid, the periosteum dissected out of the way, and the bone was chiseled carefully down to the cells; a very small quantity of pus escaped from two sinuses; they were united by chiseling a groove from one to the other; the inner surface to the outer plate was rough, and small particles of bone were easily loosened; these particles were removed; the cavity washed with a 1 to 500 bichloride solution, lightly packed with gauze, and dressed in the usual way.

The after-treatment consisted of keeping the wound well cleansed with a 1 to 2,000 bichloride solution and lightly packing with gauze each day. The patient's septic condition cleared up at once, there being no elevation of temperature after twenty-four hours; the pain was relieved, locomotion became perfect, and the general tenderness around the ear was gone. Granular tissue in the ear was curetted and cleansed with bichloride, but a month later made application of 95 per cent carbolic acid for three or four applications, each a week apart, which gave the desired result of destroying the granular tissue and thus

arresting the aural discharge. Fortunately the hearing is not impaired to any appreciable degree.

The last case which I shall report shows the dangers of delay and as well why we have trouble in getting the consent of patients for operative work at the proper time.

CASE 4. I saw Mr. L., aged thirty-nine years, in consultation; the case was a strangulated indirect inguinal hernia; taxis had been unsuccessful. There was a disagreement as to operative work in case a reduction could not be made under anesthesia. The patient's mind was biased against an operation; further consultation was had, and, what proved to be unfortunate in the end, a reduction of the mass was accomplished under anesthesia. A truss failed to do successful work, for immediately following a free action from the bowel the same day the hernia again descended into the scrotum. Taxis again failed even under anesthesia. Forty-eight hours afterward I saw the patient again with several consultants. Circulation was 154, respiration 38, and a slight elevation of temperature. By this time the patient asked for an operation. An unfavorable prognosis was given, but an attempt at relief was undertaken.

The tissues were divided down to the sac; from the sac the usual fluid accompanying a strangulated hernia—which in this case was excessive—was removed, and some fecal matter was found free in the sac; the gut had a small opening about one and a half inches below the point of strangulation, and at numerous points the necrosis was so far advanced as to require at least five inches of the gut to be resected. The anesthetist had to give the patient strychnia and nitro-glycerine from the beginning of the anesthesia, and when the gut was divided the shock to the patient was alarming at once; however, the operation was completed as rapidly as possible, but the patient succumbed without gaining consciousness from the anesthesia. This case illustrates what we have to contend with in the country.

So, frequently when operative work would promise excellent results we must wait and hear exclamations about the "cruel knife" and the "cutting doctor," and then, as the end is nearing, we are told, "Well, if there is any chance at all, go ahead and operate."

Surgery in such cases usually brings the art into disrepute in local communities, and in the majority of cases needing operative work in the country we find them advanced to that point where there is no

other chance for recovery whatever, and that chance is reduced to the minimum by being put off as the very last resort.

The laity is not always at fault, for oftentimes the family physician never loses an opportunity to deplore surgery, and sometimes I fear his deplorations are due to the fact that he does not do such work, and, rather than to have it done, he prefers to trust to medication. Let us as country doctors get rid of old foggy conservatism, any way to that degree so that we will do or have done what is best for our patients, and let us never depreciate that branch in our profession that does so much to restore health, prolong life, and alleviate suffering.

FLEMINGSBURG, KY.

Reports of Societies.

KENTUCKY STATE MEDICAL SOCIETY.*

[CONTINUED FROM PAGE 98.]

"Etiology and Treatment of Pneumonia," by Dr. Frank C. Wilson, Louisville.

"Treatment of Lobar Pneumonia," by Dr. John G. Cecil, Louisville.

Discussion. Dr. George W. Beeler: I have no criticisms to make on the papers read by Dr. Wilson and Dr. Cecil. Those papers are conservative. There are a great many things I would recommend with which I have had experience. But I want to say this, when I began the practice of medicine the treatment was blood-letting, and later blistering, and still later the use of *veratrum viride*. I have bled hundreds of patients with pneumonia and pleuro-pneumonia, and I can say that my experience with tartar emetic and the lancet, too, was a good one. After years of experience along that line there came to be considerable opposition in the schools by leading professors to the use of tartar emetic, bleeding, and blistering. It was easier to follow their teaching. So I have not bled a patient for a long time. But I would not hesitate to bleed if I had a case demanding it. I have bled patients, seventy years old and over, and they recovered. When I practiced that system I was more successful than of later years. A paper was read at Shelbyville a few years ago in which a doctor spoke of the pneumonic germ and the modern treatment, the supporting treatment,

* Meeting held in Louisville, May 17, 18, and 19, 1899.

and the stimulating treatment. He said that he remembered under the old treatment of blood-letting, tartar emetic, and blistering the percentage of recoveries was much larger; it occurs to me that he said the proportion was about 17 to 8 per cent. In regard to salicylate of soda and ergot, I have never had any experience with them. I should suppose the salicylate of soda would be a good remedy. It is an antipyretic. As to the coal-tar preparations, I agree with the gentlemen who have preceded me, I would not give them. Some years ago I had five cases in one family, and I am inclined to believe in infection because I had these five cases in one family, and they were all followed up with malaria. Quinine was scarce, and we used cinchonidia a great deal as a substitute. To those cases I gave cinchonidia, Dover's powder, acetate of potash, and muriate of ammonia, and they all got well. I am satisfied of one thing, that we used to bleed a great many patients who would have recovered without blood-letting. And I am satisfied, too, that we now often lose our patients because we fail to deplete. When I first entered practice, and when I was attending lectures I listened to a great many eminent men, such as Dr. Wood, and they recommended blood-letting when we saw the case early.

Dr. F. J. Yager, Campbellsburg: These two papers show a great deal of intelligence and a great deal of research and a great deal of practical and close observation. I have no criticism to make of them. I was delighted at the exhibition they give in defining pneumonia, the history of pneumonia, the treatment of pneumonia, the remedies used, and all the able discussion of the time when I lived and worked away back there. I have taken a step forward, and I can now reasonably endorse what they say. The gentleman knows my history exactly. We have tracked the snow together with the lancet in our pockets, and I have no doubt we could go in the same track in treating pneumonia. He tells you strictly and strongly that he doubts very much whether there have been as many cases saved by the modern methods of treatment, according to the number of cases treated. When our country here was full of timber and damp air and malaria, and all the materials which bring about such a result as pneumonia in the human body, that disease was more prevalent, and I doubt very much whether they have the success now that we had in the days of old. I remember that I hardly had a case of pneumonia but I would feel disposed to take out my lancet and pierce the vein and let the blood flow. There is another feature about this. Just as soon as the

patient would be in pain in pleuro-pneumonia and would make a noise with every breath, I would take out my lance, and in a little while he would say, "Oh, how much better I feel! How good I feel! That is the beginning of a new life." There are cases now that come up in which it is just as necessary to use the lance as ever before. I have bowed to sentiment many times when afterward I was sorry for it. I am willing to take to the new systems and plans, but I am not willing to use strychnia as the best stimulant. I do not believe that is the best stimulant in these cases of pneumonia, and as to opium, that is dangerous to use to any great extent.

Dr. Snyder: The paper was full of wholesome truths and practical ideas. Any man who proposes to keep up with the progress of time would not for a moment think of depleting his patient at the present time. We have enumerated the remedies that support the patient. If we do not understand the action of those drugs, then as men dealing with life it is our duty to study up the action of them. The lancet may have served its purpose, but those days are past. I feel that I have been benefited and strengthened, and I think every one of us has been benefited.

Dr. Stucky: It is with a feeling of hesitation that I arise to discuss these admirable papers, after the addresses of my distinguished predecessors. In the first place, Dr. Wilson's paper, in dealing with the abortive treatment of pneumonia by the use of ergotin and the salicylate of soda, gave to us the doctrine instilled into me as a student twenty years ago. I have either used these drugs wrong or they do not act as we believe they do. I can not see how ergotin by its action upon the vessel wall is going to exercise a sufficient local influence, notwithstanding its constricting influence, notwithstanding its contractile power, to relieve a hyperemia which may not only be active but decidedly passive in character. I can readily see how the salicylate of soda may be a defibrinizer and an antipyretic, and may exercise an antiseptic influence, but in the management of pneumonia I believe the doctrine laid down by our forefathers has been amplified very materially by elimination. They say they do nothing but deplete, but we can deplete equally as well through the skin, diaphoresis, or through the kidney, or better still through the alimentary tract. I believe in every case in which there has been an interference with oxygenation we find an interference with oxidation. There is hepatic torpor. There must be an unloading of the liver. Carbonate of

ammonia I would eliminate from my armamentarium of drugs to be used in pneumonia. We have all experienced often enough the irritating influence it has on the stomach. We have all had the nausea and gagging, and why should we throw out the chief entrance of support to the animal economy. Of cold I most heartily approve, exercising as it does the constringing influence ergot has, if it has, and besides, being a decided sedative and great ameliorator of pain. Stimulation should be had from the start, without waiting until the heart is weak. Keep the heart supported so that it will not become weak. Oxygen is of the greatest value, relieving pain, supporting the heart, increasing the distension and chest expansion, and giving the patient the greatest comfort.

One word regarding Dr. Cecil's paper. I am in most hearty accord with every thing he said. I believe sex, nationality, nativity, environment, and occupation each has an influence, so that every case of pneumonia stands out as a distinct case, for which we can not prescribe a proscribed treatment.

Dr. W. W. Richmond, Clinton: I wish to say a word in reference to salicylate of soda and ergot. Twenty years ago I was in the habit of using ergot in those cases in which I believed the disease could be modified. I must say, with these old friends of mine, that I have never yet, in a case in which I believed the symptoms could be modified, found any thing which answered the purpose so well in my hands as *veratrum viride*. I have seen a number of cases in which the carbonate of ammonium was used. To go back to the old plan of dividing the cases into sthenic and asthenic, I believe there are many cases of pneumonia which if let alone will get well without treatment, and again there are many cases which if you do not treat properly will die. I do not mean to say that we cure all these cases, but we do pursue a plan and course of treatment by which the symptoms are so modified that we assist nature to a favorable termination. I do not know any method by which we so aid these patients as by the early administration of *veratrum viride*; that is, in the first twenty-four to thirty-six hours. After the lapse of that time we have no use for it. In many cases where the pulse is strong and the heart active, while we may relieve the patient with opiates, we are more sure of relieving the condition without harm to the patient with *veratrum viride*. It is the least harmful of arterial sedatives. I regard it as more harmless than aconite or digitalis, and I have learned in twenty-five years' experience

not to place too much confidence in the last named remedy. I believe the subnitrate of strychnia, if used early, is more reliable. In fact, I believe it stands at the head of heart stimulants. I have always been a little skeptical about digitalis, but when using strychnine I feel I have a remedy that will not deceive me. I do not regard veratrum viride as so dangerous a drug as the other heart sedatives. When we give a drug in these cases we want something that will act quickly and certainly.

Dr. Frank C. Wilson, Louisville, in closing: I have only one word to say, and that is in reference to the action of ergot. Ergot I think undoubtedly has a sort of selective action, selecting those arterial vessels that are apt to be in a state of vasomotor paralysis. When you administer ergot its first action is upon any portion of the circulation that is in a congested condition, and acting upon that I have seen the effect of it most markedly illustrated in the results obtained in these cases. I could recite case after case from my own personal experience, but of course I would not care to encumber the paper with such details.

"Hernia and its Operative Treatment," by Dr. J. L. Johnson, Louisville.

Discussion. Dr. T. B. Greenley, Meadow Lawn: I only rise to thank the doctor for the paper. It shows a great deal of study of the matter, and I think it is a very able paper.

Dr. W. C. Dugan, Louisville: There are several points I wish to refer to. First, in reference to the use of the truss in children. The essayist admitted that sometimes you get good results with the truss in children, and I wish to take exception to that and say that if you advise the truss in children you will, as a rule, get good results. If you use a bandage and do not try to force the hernia back, you will get good results as a rule. In regard to pressure on the cord causing varicocele, such has not been my experience. I think such a result could occur only from the abuse of the truss and not from the use of it, because if you have a truss applied so low down as to press on the cord as it goes over the symphysis pubis, any bad result will be due to the faulty application of the truss and not to its use. The truss should be applied, not over the symphysis but over the internal ring, where the hernia comes out. I admit that if you apply the truss with such force, and if the truss be of conical shape, you may have absorption of the tissue and again have bad results. But the truss should not

be of that shape. It should be broad and with a spring of not sufficient force to give the patient pain. Of course to go into the operation of hernia and bring it up, as the doctor has done, requires time, as has been demonstrated. He has covered the subject thoroughly. He spoke of the Halstead operation being in its essential features the same as the Bassini. Again I wish to differ from the doctor. In the essential features the Halstead operation differs most widely from the Bassini. The Bassini operation simply restores the anatomical parts. If you will study the anatomy and then read up the Bassini operation, any one can appreciate the strong points in the operation: Making your incision and opening up the fibers of the external oblique, exposing the cord, as the gentleman has stated, separating it from the internal ring down, lifting it up, passing your finger around and separating it from the internal structures, which is the most essential point, as claimed by McBurney and all operators of modern times, and then tying the cord very high up. Then there is one point that I think the doctor did not make strong enough. The sac should not be opened until you separate it, if possible. Then after reducing the hernia take the body of the sac up in the hand and pass the finger down into the cavity, so that the assistant can tie over the finger. This should be done for two purposes: First, you can not include part of the omentum or a knuckle of the intestine, which has been done a number of times by competent operators when they neglected to tie off the sac high up and tie over the finger. This is a very important point, and one I wish to emphasize, to introduce the finger to be sure you do not include part of the viscera. And secondly, it should be done in order that you may be able to place the ligature well down on the peritoneum, and thus do away with the infundibulum that nature has left.

Dr. J. D. Maddox, Rockport: Just one word in regard to strangulated hernia and a manipulation which I do not remember seeing or hearing mentioned, and which, if it had been mentioned, was found on my part accidentally. It is a manipulation from the outside. Trying to reduce a hernia with the hips elevated and failing to do it, I reached above the tumor (or rather below in the position occupied by the patient), and, accidentally catching hold of the intestine, I succeeded in pulling it out from below. That is, instead of pushing it out, as we ordinarily do, I pulled it out with simple traction.

Dr. J. L. Johnson, in closing: In reference to opening the sac, I said that I had been compelled in many instances to open the sac

before separating it. I think it is advisable to first separate the sac, but sometimes that is impossible. The gentleman stated that I said that the essential features of the Halstead operation and Bassini's operation were the same. I think I did not say that, but I said, having mentioned the essential features of Bassini's operation, I would pass on to Halstead's.

"Some Cases of Country Surgery," by Dr. C. W. Aitken, of Flemingsburg.

Discussion. Dr. J. B. Bullitt, Louisville: I am sure that I voice the feeling of all the other gentlemen present when I congratulate the doctor and deplore, with him, the death of the last patient mentioned. Dr. Aitken has aptly put it, for these cases are certainly often sacrificed by the family and family doctor despite the surgeon. It is difficult to know how to deal with these cases. This is notably true of those cases of appendicitis in which an early operation would be successful; but often these cases do not come at that time, and when the surgeon is called in as a last resort the patient dies, and he is often said to have died as a result of surgery. It is an old story and a question that confronts us to-day. The question arises all the time, What is the proper thing to do under such circumstances? Should the surgeon be willing to shoulder all the opprobrium that comes to him and surgery in case of a fatal issue, or should he refuse to operate in these cases in which surgery is so long deferred? I believe it would often be better for the surgeon to say that the case has progressed so far that an operation is hopeless, and the physician who has recommended waiting should be compelled to shoulder the opprobrium of the fatality, and the public would soon come then to understand that when the patient dies from a late operation the fault is often with the physician and not with the surgeon. So long as the surgeon is called in late and operates, he will be blamed in case of death for what is manifestly not his fault. I know a great many surgeons feel a sort of responsibility and moral obligation to operate upon these patients and give them any possible chance. But really it would seem that our duty to humanity under such circumstances is frequently to refuse operation, for thus we may eventually do much more for the patients in the future than we can for the patient at the time we are called upon to do an operation that is practically useless.

Dr. Dugan, Louisville: I have only one point to make, and that is I think the doctor should not have gone on and made a resection in the operation, which only made it that much more hopeless. When he found the condition of the patient almost hopeless he could have left an artificial opening and given the people to understand that he simply opened up the hernial sac. I think that would have been better. In regard to the first case mentioned, of operation for appendicitis, I am exceedingly glad the doctor reported finding those foreign bodies in that case. I have operated now something over one hundred times for appendicitis, and have found a foreign body only one time. Several times I have found enteroliths, and sometimes thought that I found an orange seed or a lemon seed, but on pressing it between the fingers I would find it only an enterolith, and not a foreign body. The doctor is certainly to be congratulated upon the technique in that case. The responsibility he assumed was very great indeed; the high pulse and temperature and the vomiting certainly made it look grave. I am exceedingly glad he reported the mastoid cases, for they are so often neglected by the country practitioner, the "country doctor," as he has put it. They can all relieve those cases by simply cutting down and opening the bone with a chisel. Often one stroke of the chisel will relieve the pus. I would take exception to one statement of the doctor, and that is in reference to closing up the wound in gall-bladder cases. I always leave the gall-bladder open for drainage. It seems to me very important to have drainage and let the wound heal by granulation. If you find a stone down in the common duct, it is recommended that we should not attempt to remove the stone at the time of the operation, but stitch the gall-bladder to the wound and wait for the stone to come back. I confess that I lost one patient by irrigating before the adhesions were sufficiently firm. We should wait several days until the parts are well united, and then we can irrigate, fill up the ducts, and invite a return of the stone.

Dr. William Bailey: I shall not presume to discuss the surgical matters at all, but I want to say a few things from the standpoint of the general practitioner. I believe that the duty of the physician should be a conscientious one, and as far as possible it should be an intelligent duty. There are certain diseases that I think we all recognize at the present day are largely surgical. To illustrate this I will ask your attention to the question of diseases involving the appendix. As a general practitioner I am ready and free to say to you

that they can not ask me too soon to bring the aid of the surgeon when I recognize appendicitis. I believe that evil comes from delay. The possibilities of recovery are lessened every way. Consequently, when I am called and recognize a case of appendicitis, I select a conscientious surgeon and ask him to see the case and ask him to determine, as he is better able to do, whether operation is proper. And thus I believe I am doing the best thing possible for my patient. Our duty is determined by following our convictions as to what is best in the individual case. As to the propriety of the surgeon refusing to operate because it will do surgery an inquiry, I am not much in sympathy with that suggestion. Here is an opportunity possibly to save the patient's life by surgery, and even though the chances may be only one in a hundred, we should honestly give that patient, even at the expense of the reputation of the physician and surgeon, the one hundredth chance. (Applause). Gentlemen, when we are confronted by this question, if we will honestly perform our work and conscientiously do our duty, we will not regret any false impressions that may be credited.

Dr. J. F. Yager: I arise to endorse my old friend, Dr. Bailey. His suggestions were of the best and most liberal character. Dr. Bailey told you the solid truth that in our duty as general practitioners and in our work as general practitioners we should teach the community at large that it is not so much of an operation to open the bowel, to make a little incision and know what is there to a dead certainty, and not go about with an uncertainty, and when the patient dies not know what he died of. I believe it is best to call in the surgeon, as Dr. Bailey said, and throw the responsibility upon him and not risk ourselves. And as to hurting the science, why, that is nonsense. Quite a number of patients are saved even in bad cases. And what is the value of a life? The operation is so innocent when properly and scientifically done. Let the constitution be pretty fair and every thing be on a level with what we call healthy, and then if the operation is performed in the proper way, almost every case would probably get well. It has been suggested that we should not run the risk in bad cases. Why, let us run it, and half the cases probably will get well.

Dr. Cherry: I want to mention a case to illustrate what often occurs in these cases. In the case of a very fat negress with a long hernia there were symptoms of strangulation. Under anesthesia the hernia seemed to be completely reduced. The ordinary gurgling was heard. Several gentlemen present thought that it was all right. A few days

later I was passing by and was called in, and the most fearful odor met my nostrils. I found that the bowels had moved well, and that there was no tenderness and no vomiting, yet there was sloughing of the abdominal wall. It speedily caused the death of the patient. I simply wished to mention the case to show that not all cases are as simple as we might expect them to be.

Dr. Aitken, in closing: I agree with Dr. Bullitt in his remarks about the time and whether we should operate in cases. It is our duty to let the family know our opinion in regard to the case, and then propose an operation and give the patient any chances that may be left. Dr. Dugan's criticism in regard to the hernia case I think is a justifiable criticism with reference to the artificial opening. If I had to do the operation again, I should take the suggestion offered by Dr. Dugan and make an artificial anus. The reference to the number of operations made without finding foreign bodies calls to my mind that I have found three cases in which there were foreign bodies; two of them were melon seeds, and the third one was that referred to in the paper in which a chestnut hull was found. As to leaving the gall-bladder open for drainage, I think that should be done as a rule, but the obstruction here was so complete from malignant disease that it seemed to the operator and those about him as well for the patient to be dead as alive, and the sooner death came the better, owing to the cancerous condition. If all our practitioners were like Dr. Bailey and these gentlemen who are each year in attendance upon the meeting of the Medical Association we would have no trouble getting to operate upon these cases. The difficulty comes from the practitioners who stay at home and do not keep abreast of the times.

[TO BE CONTINUED.]

Abstracts and Selections.

THE IMPORTANCE OF SEPTA AND POCKETS IN THE ANTRUM OF HIGH-MORE WITH REFERENCE TO OPERATION.—This was a paper by Dr. John O. Roe, of Rochester. He said that too little consideration had been paid to the anatomical details of this cavity. Four features should always be taken into consideration with reference to operation: the position of the sinus; its size, shape, and conformation; the thickness of its walls, and the relation to it of the roots of the teeth. He exhibited a series of skulls which had been prepared to illustrate these points. He also exhibited an

antrum-searcher, which consisted of a flexible wire spring with probe point. It ran in a canula, and could be extruded from the latter after it had been passed into the antrum. In this way it was possible to get a very accurate idea of the interior of the cavity, even through a very small opening.—*Medical Record*.

FETAL CHONDRODYSTROPHIA.—Axel Johannessen (*Norsk Mag. for Laegevidensk.*, No. 2, 1898) reports very fully the examination of a female infant, 1 month old, with hyperplastic chondrodystrophia, or, as it is more commonly but less correctly called, "fetal rickets." The infant was atrophic, and died when about 7 weeks old. The internal organs were normal. There was spinal kyphosis; the head was normal, there being no premature ossification of the basis cranii; the ribs were normal, but the clavicles had thickened extremities; the diaphyses of all the long bones were short and thin, while all the epiphyses were much enlarged and deformed, and the freedom of movement of the joints was much diminished. The pelvis was much contracted, the conjugata vara measuring only 6 mm. These points were well demonstrated by means of Roentgen-ray photographs, and these are reproduced in the paper.—*British Medical Journal*.

FIBRO-LIPOMA OF THE BASE OF THE TONGUE.—This was a report of a case by Dr. E. Fletcher Ingals, of Chicago. His patient was a farmer, aged twenty-eight years, who for three or four years previous had suffered from difficulty in speaking, swallowing, and breathing. Some time previous to his coming under observation, the cautery along with scissors and snare had been applied with some relief. For the last two months all the symptoms had been aggravated, especially dyspnea on lying down. On examination a smooth tumor with congested surface could be seen situated in the laryngo-pharynx, apparently attached to the right two thirds of the tongue and the right pharyngeal wall. It seemed to be of a fibrous nature. Removal with the cold wire (No. 5) snare was attempted, but the wire broke three times. A uterine écrasure carrying a No. 8 wire, properly bent, proved to be the ideal instrument. One large mass measuring from one inch to an inch and a quarter in its various diameters was removed at the first sitting, and later other smaller masses were removed. Some were fibrous, some fatty, and others were of the mixed type. Attachment was found to be to the right side of the epiglottis, the right pharyngo-epiglottidean fold, the right side of the pharynx, and possibly the base of the tongue. The patient had been seen that very day, and it was noted that there was an adhesion between the epiglottis and the right side of the pharynx and the base of the tongue. This would prevent the epiglottis from shutting down over the larynx during deglutition, but there was no difficulty in swallowing.

Dr. Woolen said he had seen a similar case. The wire had been slipped over the growth several times, as he had shown the case to students to demonstrate the mode of removal. When operation was finally attempted,

the patient suddenly ceased to breath. After resuscitation the attempt was again made, and just as the wire was tightened cessation of breathing again occurred, and this time resulted fatally. No anesthetic, local or general, had been used. If such had been the case and death had ensued, it would have been attributed in all probability to the anesthetic.—*Medical Record*.

PROTARGOL IN GONORRHEA.—Colombini, of Barduzzi's Instituto Dermosifilopatico in the University of Siena, speaks well of the effect of protargol in gonorrhea (reprint from *Atti della R. Accademia dei Fisiocritici*, Serie iv, vol. x, 1898). He keeps at hand a 10-per-cent solution which he prepares by pouring 5 c.cm. of neutral glycerine into a small mortar, and adding to it 10 grams of protargol, stirring up the mixture with a glass rod till a thoroughly homogeneous moist paste is produced. This is next diluted with 95 c.cm. of cold sterilized water, and shaken up till a perfect solution is produced; this solution is kept in a colored bottle in a dark place. As required, a 0.25-per-cent solution is made by mixing $2\frac{1}{2}$ c.cm. of the standardized solution with $97\frac{1}{2}$ c.cm. of sterilized water; a 0.50-per-cent solution by mixing 5 c.cm. with 95 c.cm. of water; a 1 per cent by mixing 10 c.cm., and a 2 per cent by mixing 20 c.cm. of the standardized solution with 90 and 80 c.cm. respectively of sterilized water. These solutions he uses as urethral injections according to the stage of the disease. In the acute stage he uses the 0.25-per-cent solution. After making the patient pass water, and washing the glans and prepuce with some antiseptic solution, he first injects a syringeful of protargol in such a way that sufficient room is left for the outflow of the injection; then refilling the syringe (which is made to hold 6 c.cm.) to two thirds of its capacity, he injects the solution very slowly, blocking the meatus completely so that it may not run out again. The syringe is carefully removed, the patient being directed to keep the meatus closed with his fingers for fifteen minutes, and not to pass water for an hour. As the inflammation subsides, the strength is gradually increased up to 2 per cent. The solution is injected at the temperature of the air. The first day one injection is given, the next one in the morning, and another in the evening; the third and following days one in the middle of the day as well. The injections are continued for twenty days after the cessation of the discharge, the daily number being gradually diminished to one. Colombini gives details of 21 cases, and sums up that the results were excellent in every respect. The gonococcus quickly disappeared, the subjective phenomena speedily ceased, the discharge was rapidly diminished and modified, and complete recovery occurred without any complication. According to him, it realizes the ideal of a remedy for gonorrhea, curing the disease rapidly and effectually, without the least irritation or undesirable after-effect on the mucous membrane.—*British Medical Journal*.

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ANESTHESIA.

There is no more important matter to be considered than anesthesia. Every practitioner should thoroughly familiarize himself with the technique of this most important part of the art.

First of all, the condition of the heart should be investigated; then the lungs and general condition. The kidneys should not be overlooked, and the condition of the urine should be carefully noted. Chronic catarrhal conditions of the lungs and larger bronchial tubes contra-indicate the use of ether. The recumbent position is an absolute necessity to safety. This rule should never be varied if there is any possible chance of maintaining it, because it is always desirable to keep the brain well supplied with blood, and this can not be done in the sitting posture or the semi-recumbent position.

The stomach should always be empty. Not less than four hours should intervene between the time of administering the anesthetic and the last meal, and eight hours would be better. It is well not to let the patient know just when the operation is to take place; then the mental effect upon digestion is avoided. We have seen a child under seven years of age with its stomach full of undigested food eight hours after the meal as the result of its anxiety concerning an operation which was to be performed on its eyes.

The flannel-covered wire cup is probably the most convenient device for administering an anesthetic; but a towel, paper cone with a napkin secured inside it, or a tumbler with a napkin stuffed into it, will serve the purpose.

From four to ten minutes is sufficient time to anesthetize any person with chloroform; ether requires almost double the length of time. One drachm of chloroform is quite enough to place on the inhaler at one time. Frequent renewals in small quantities are preferable to saturating the inhaler; that is, the napkin or towel, if these articles are used. Plenty of fresh air should be admitted, but the windows of the room should, as a rule, be closed.

The anesthetist should never forget that he is responsible for the good or bad results that may follow his work, so far as the anesthesia is concerned. His whole attention should be given to the patient. He should not for one moment allow himself to become interested in the operation, or any thing but his work and the patient. He should see for himself that all clothing is loose about the chest, abdomen, and neck. The clothing should be so arranged that he can at any time see the movements of the chest and abdomen. With one hand the temporal artery can always be felt, and any change in the heart-beat can be noted from this. The circulation in the skin of the face, ears, and lips should be closely watched. Pallor of any of these structures demands an investigation into its cause or causes, and the circulation should be restored before proceeding. Sudden cessation of respiration demands prompt action in the withdrawal of the anesthetic, admission of fresh air, artificial respiration, stimulants, elevation of the feet to give gravity a chance to send blood to the brain, ammonia to the nostrils, strychnia, and nitro-glycerine hypodermatically; all these things should be done when demanded.

In artificial respiration care should be taken not to put your patient through the maneuver more than eighteen or twenty times per minute, as otherwise the very object that you wish to accomplish will be defeated. There must be time for the air to pass in and out, and some time for interchange of gases in the lungs. The possibility of the tongue's falling back into the pharynx and blockading the respiratory tract should not be overlooked. In holding the tongue out, care should be taken not to depress the lower jaw, which will very materially interfere with breathing. In cases where the patient is apparently dead, artificial respiration should be kept up for at least an hour.

TUBERCULOUS DAIRY CATTLE.

The Chicago Board of Health recently applied the tuberculin test to a herd of sixty cattle, and twenty-five of that number showed a rise in temperature, which is indicative of the presence of tuberculosis. This test was confirmed by post-mortem examination of the cattle.

It is admitted that fully ten per cent of all the dairy cattle in the country are tubercular, but this shows that fully forty per cent of that particular herd was infected. The milk of any given dairy is usually mixed before sending it to the consumers, and the result of it is that all the milk from dairies is tuberculous to a degree. It is certain that tuberculosis will not decrease in cattle as long as the boards of health are as careless as they are at present. There is a great howl sent up if a dairyman is caught watering his milk or putting a little innocent coloring-matter into it, and he is hauled up before the City Court and fined; but he can keep diseased cattle in his dairy continually and sell as much tubercular milk as he pleases, and go unmolested. Why is this so? Because the authorities do not do their duty.

The action of the city of Baltimore concerning tuberculous cattle could be profitably imitated by other cities. The health board of that city had every dairy cow registered, and if its owner wished to move a cow from one side of the street to the other he was obliged to get a permit from the Board of Health. This is essential in order to carry out the proper workings of the board. Baltimore controlled her dairies and milkmen, and made the dairymen sell milk from healthy cows, and there is no reason why it should not be accomplished in this and every city in the world, for that matter. It will work hardship on some, and will cost the State and city some money, but it must be done.

The law concerning tubercular cattle is quite sufficient for all practical purposes if the inspector of dairy cattle will only do his duty and test each cow with the tuberculin. If we are to lessen the number of deaths from tuberculosis we must begin by cutting off the sources of infection, and it is now a settled fact that milk carries the tubercle bacilli in great numbers, and of course some of the many millions of these germs find a suitable soil in the human body and there begin their work of destruction. Aside from heredity and the direct inhalation of the germ from infected persons by sleeping with them, and by inhaling it from dust, it is most likely that milk affords the greatest

opportunity for the propagation of this disease, hence the necessity of having this great food-supply free from contamination. It is estimated that about one seventh of the human race die annually from tuberculosis, which to a degree is preventable.

If smallpox, cholera, or yellow fever were in our midst, causing as many deaths each week as consumption does, we would all be up in arms fighting it day and night; and yet we pay no attention to this hideous monster that is sapping the very life of our nation. The reason for this apathy is probably due to the insidiousness of the disease and its long, lingering course lending hope to its victims. It is in reality "death on a white horse," and the horse never sleeps; he is going day and night, and never fails to make time. Although it is occasionally slow time, he gets there.

Let the dairy cattle be tested, and let a competent bacteriologist sample and inspect each dairyman's product once each month, for in that way only can we have pure milk.

THREE-YEAR MEDICAL SCHOOLS.

When the Kentucky State Board of Health recently issued a ruling refusing to recognize in any sense the diplomas of medical colleges that graduate any student who has attended less than four full courses of lectures in four separate years, we did not suppose that any college would be bold enough to question the propriety, the justice or authority for such a ruling. We are therefore not a little surprised to learn that the schools requiring attendance upon but three courses of lectures are not only very much disturbed about this ruling of the Board, but have even become offensive in threats of *legal prosecution* and other *dreadful things to compel the State to recognize the diplomas of their schools*.

Unfortunately, officers high up and conspicuous in the Southern College Association have been the most persistent in the denunciation of this laudable effort of our State to uphold a higher standard of medical education. This does not speak well for the Association, after what occurred at the meeting of the Association of American Colleges in Columbus, Ohio, in June of this year, where the representatives of the Southern Association expressed not only a willingness but a determination to do every thing possible to encourage students to attend four courses of lectures before offering for graduation, and to induce the schools of the South to adopt the four years' graded course.

They were especially emphatic in asserting that any contract with medical students who had previously matriculated in a school ("that they may apply for graduation after attendance upon but three courses of lectures") could not apply to any students save those previously matriculated in that particular school. The advertisements in the medical catalogues and in the medical press from these schools for the next session do not indicate good faith in this particular in any sense, for the fact is made conspicuous that students who matriculated prior to the session of 1899 and 1900 may apply for graduation after attendance upon but three courses of lectures. If a college had no desire to extend this privilege to other students than its own former matriculates, why the necessity of this effort to procure students of other colleges? And why not mention the fact that the privilege must apply only to the students of the college issuing the advertisement?

There are no palliating circumstances to justify any school in the United States in graduating medical students who have not attended as many as four courses of lectures, and we congratulate the medical profession, State boards of health, State examining boards, and local and national associations in the interest of higher medical education upon the determined stand they have taken to compel medical colleges to conform to their requirements.

Such medical colleges as require attendance upon but three courses of lectures, with few exceptions, have poor equipments in clinical and laboratory facilities, and no one knows better than the teachers in such schools the indefensible position they have assumed; and medical students should take timely warning and not be induced to graduate except from schools that conform to the nearly universal demand of the profession of the entire country. The student who does otherwise will find himself subjected to humiliating criticisms and must suffer in conscience and in purse.

THE SOUTHERN MEDICAL COLLEGE ASSOCIATION.

The fact that colleges of this Association find it necessary to allow students to graduate after attendance upon but three courses of lectures, and admit students to advanced standing within three months after the completion of a previous course of lectures in another school, is an open confession that these schools are either badly equipped for scientific and successful work, or that they are badly conducted.

If the students of the South go to Kentucky or further north to attend medical lectures, it is because they feel that they are offered better facilities—otherwise they would not incur this greatly increased expenditure of money.

It is to be greatly regretted that under the rules of this Association a student may matriculate in advanced standing within three months after completing the work of a previous course of lectures; and the evil of this rule is especially emphasized by the fact that there are two flourishing spring and summer schools in Louisville, the sessions of which close July 1st—just three months before the schools of the Association begin in the fall. The students of these two schools may get credit for one course of lectures, and then get credit for half of another course within one year, a misfortune to be deplored by every member of the medical profession who has any appreciation of the benefits of a higher standard of attainments in medical education; and this must not and will not be permitted to continue.

Some of the three-year schools of the Southern Association admitted the students of the spring and summer schools to advanced standing during the session of 1898-9; and several of these students had no credentials to show that they were entitled to credit for lectures that would admit them to advanced standing, having nothing but a matriculation ticket and laboratory tickets, which were issued to them when they entered the school the previous session, and did not indicate that they had attended any part of a course of lectures.

Notes and Queries.

THE twenty-fifth annual meeting of the Mississippi Valley Medical Association will be held in Chicago, October 3-6, 1899. An excellent program has been arranged, and the meeting promises to be one of the best in the history of the Association.

THE eleventh annual meeting of the Tri-State Medical Society of Alabama, Georgia, and Tennessee will be held in Chattanooga, Tuesday, Wednesday, and Thursday, October 24, 25, and 26, 1899. The prospects are good for a fine meeting. Those desiring to read papers should send the titles to the Secretary, Frank Trester Smith, Chattanooga.

A QUESTION OF CHEMISTRY.—Said Mickey Finn to the patrons of O'Shaughnessy's bar-room: "Me by is stiddyng fwot he calls ke-mist-ree, but Oi think it 's dom humbug. He said last noit that if he tuk one bottle

of oxy-gin an' two of hydero-gin, that thin he could make water. Oi said nothing, but Oi thought any dom fool knew that without going to a school to learn it."—*American Druggist*.

ATROPINE IN DELIRIUM TREMENS.—Touvine (*Archives Medicales Bel-giques*) administers atropine to his alcoholic patients in one sixtieth grain doses hypodermatically. The result is to quiet them, and to put them to sleep in a few minutes. It is believed that the prompt action of the atropine is due to its stimulating effects on certain centers of the brain, thus inducing the quiet and sleep.

ANOTHER death attributed to "Christian Science" treatment is reported from Needham, Mass., in the case of a child named James Van Alst Hedenberg. The child became ill with dysentery August 1st and died August 18th. The case has attracted considerable interest on the part of the physicians of Needham, and it is reported that some action will be taken in order to apprehend the guilty party, who in this case offers the excuse that she did all she could.—*Journal of the American Medical Association*.

DANGER OF THE NASAL DOUCHE.—Lichtwitz (*Internat. Centralbl f. Laryngol.*, June, 1898) advises that the nasal douche should be used only in cases where there is increased secretion or crust formation—in fact, where something has to be removed. The dangers in the use of nasal douches are as follows: (1) Disturbance in the sense of smell due to the action of chemicals on the nasal mucous membrane. (2) Headache. (3) Suppuration in the middle ear.—*British Medical Journal*.

PREVENTION OF PREMATURE OLD AGE.—Hermann Webber (*Ztschr. f. Diätet. U. Physic. Therap.*) says that early senility of the nervous system is observed principally in the male. Cardiac and arterial degeneration, he claims, are the chief causes, and recommends that treatment should be commenced early in life on account of heredity, which frequently plays an important rôle. Moderation in eating, drinking, tobacco, and sexual pleasures is recommended. Regularity in living, early rising, six to eight hours in bed—age regulating this—plenty of exercise in the open air, and a moderate amount of mental activity constitute the plan of treatment.

MURPHY'S BUTTON.—Jordan (*Revue de Chirurgie*, Supplementary Number, 1898) states that in Czerny's clinic at Heidelberg Murphy's button is used in all suitable cases, and that, thanks to this appliance, the duration of an operation on the gastro-intestinal canal may be much diminished. Gastro-enterostomy may, it is asserted, be easily performed in fifteen minutes if the button be applied instead of sutures. The use of the button, the author believes, is free from danger, provided attention be paid to contra-indications. In his early experience of Murphy's appliance he lost three patients in consequence of perforation, but since he has used sutures instead of the button in the large intestine, he has employed the latter in

more than a hundred cases without a single failure. It is important, he points out, to press the two portions of the button closely together. Supplementary sutures will in most cases be found useless. The button, though it may be passed on the seventh or eighth day, is usually retained until about the twentieth day. In Czerny's clinic gastro-enterostomy with Murphy's button has been performed in eighty-three cases—sixty-three of cancerous and twenty of non-cancerous stenosis of the pylorus—with a mortality of 12.5 per cent.—*British Medical Journal*.

THE ACTION OF ALCOHOL.—Professor Attwater, of Wesleyan University, who has recently conducted a series of experiments to determine the effects of alcohol on the human system, has reached the conclusion previously held by all but the most rabid and unscientific prohibition advocates, that alcohol taken in small and digestible amounts is a food. The experiments were mainly undertaken with a view to determine the nutritive value of alcohol. This substance was given in various forms, and pure alcohol was also administered with water or coffee. It was taken with meals. It was found that alcohol is oxidized in the same manner as any other food material, and is transformed into heat and muscular energy. Unlike, however, the fats, starch, and sugar, it does not form tissue, but gives forth energy. The experiments were not conducted for a sufficiently long period to demonstrate what the effects upon the human organism might be of the habitual use of alcohol, yet many writers in the daily press have assumed that they have proved the innocuousness of alcohol as a beverage. This is, of course, far from being the case, and the promulgation of any such belief would be nearly as injurious as is the other more familiar extreme, advocated so strenuously by intemperate prohibition orators.—*North Carolina Medical Journal*.

A NEW ANTITOXIN.—Dr. Oscar Loew, one of the vegetable pathologists of the U. S. Department of Agriculture, has developed to what he believes is a point of practical use a new germicide, which promises to supersede the serum treatment now in use in diphtheria, fevers, and many other diseases. Dr. Loew's work has been carried on for several years, in collaboration with Dr. R. Emmerich, in the laboratories of Munich and this country.

The treatment is similar in some respects to the serum treatment, but depends on a different principle, the basic idea being the presence of a class of ferments known as enzymes, which are produced by the same bacteria that produce the disease. It is because of the production, or rather overproduction, of a certain enzyme that a disease, such as typhoid, will "run its course" and then die out of the system. The bacteria in this case, it is stated, are simply killed out by the ferment they produce. The object of the new treatment is to produce a pure enzyme which, introduced into the human system, will kill the disease germs without injuring the patient. This differs from the principle of inoculation for smallpox and other diseases, where the object is to give the patient a mild type of the disease to render him immune to the more virulent type.

Dr. Loew and Dr. Emmerich have studied and cultivated the enzymes of various diseases, and, it is claimed, have found that the enzymes of certain bacteria will kill not only their parent germs, but also the germs of cholera, typhoid fever, anthrax, diphtheria, black plague, staphylococci, and probably gonococci. An enzyme that will be fatal to tuberculosis is being sought, though the bacillus of tuberculosis seems to be incapable of producing an enzyme that is fatal to itself. This is also true of the black plague, and for this reason the serum of black plague was applied without success in the cases recently developed in one of the laboratories in Vienna.

The enzymes are very unstable products, and for this reason quickly deteriorate, but Dr. Loew believes he has found a method of preserving them in shape for use. The further development of this form of treatment is awaited with interest by scientists.—*Sanitarian*.

AS OTHERS SEE US.—Professor Mosso, of Turin, the eminent Italian physiologist, has been visiting this country, and, according to the Rome correspondent of the *Lancet*, has sent home some of his impressions. Speaking of the physical development of Americans, he says in the letter quoted: "It is enough to look at the passers-by in the American streets to be convinced how much more developed and strong they are than our compatriots. The boys and girls, in point of physique, are far superior to ours. . . . America teaches us by the plainest and the most impressive of examples that physical education may be carried to perfection without any military object." It has been so much the rule with us to consider the average American physique as not quite what it should be that it is refreshing to have such testimony from a competent foreign observer. It is probable that we have been given too much to self-depreciation. It has been as much too common to underestimate ourselves in some respects as to glorify ourselves in others. The average American may be less plump than his British fellow Anglo-Saxon—if it is correct to call him so—but in bone and muscle and nerve he is in all probability at least his equal, if not, taking all classes together, his superior. This is, of course, mentioned only as an anthropologic fact.—*Journal of the American Medical Association*.

SOCIETY FOR THE ABOLITION OF VIVISECTION.—Some of the members of the Liverpool Anti-vivisection Society, considering that the English National Anti-vivisection Association is not radical enough in its aims or drastic enough in its programme, have formed a branch of the British Union for the Abolition of Vivisection. The first annual meeting of this branch has just been held, and the chairman dilated at great length upon the peril to society that all and every part of the practice of vivisection had become. The speeches made by eminent men at the opening of Liverpool School of Tropical Diseases were referred to with disapproval, and the Union's opposition to every form of experimentation on animals, or to any arrangement between anti-vivisectionists and experimentors, even in the matter of giving hospital charity, loudly proclaimed. The Liverpool correspondent of the

British Medical Journal says that now that this society has thrown off the mask it would be as well if it would style itself the Society for the Abolition of Medical Education.—*Medical News.*

INCREASING DURATION OF LIFE IN CHICAGO.—The April Bulletin of the Chicago Board of Health makes the following startling announcement: "Measured by the average age at death of all who died in the city of Chicago thirty years ago and those who died last year, the average duration of life in this city has more than doubled during a single generation; that is to say, in 1869 there were 6,488 deaths recorded, with the age of each decedent given. The aggregate of the ages footed up 90,336 years, or an average of 13.9 years for every individual decedent, old and young. Last year there were 22,897 deaths similarly recorded, with an aggregate of 672,540 years of life, or an average age for each decedent of 29.4 years. This is an increase of 111.5 per cent.

TREATMENT OF FISSURE OF THE NIPPLE.—Maygrier and Blondel (*Bull. et Mem. de la Soc. Obs. et Gyn. de Paris*, November 10, 1898) report favorably on the use of orthoform for cracked nipples. It belongs to the same chemical family as cocaine, which was tried for the same thing by Hergott. Cocaine has the drawbacks, first, of being apt to produce toxic effects; secondly, of exerting a tendency to suppression of the milk secretion. Indeed, one of the authors has used it for this purpose. Orthoform is a powerful local anesthetic whose action is more enduring than that of cocaine, lasting on an average twelve hours. It has no effect, however, when applied to the unbroken skin; and it must be kept continuously applied to the wounded surface. A slight burning sensation is felt for a few seconds when first applied. Orthoform has the further advantage of being antiseptic, so that it does not require sterilizing before use. It produces a marked effect in hastening the cicatrization of the fissures. The authors tried it in forty cases; all, without exception, experienced a more or less marked relief. They employed it in three forms: the powder with a moist dressing, the powder with a dry dressing, and a saturated alcoholic solution. For the first the powder is applied to the fissure, and sterilized gauze is placed over it and covered with a piece of protective. For nursing, the dressing is removed and the breast wiped with a sterilized compress; when the nursing is finished, the whole dressing is put back. The second plan consisted simply in the substitution of dry compresses for the wet. The third plan is to apply a few drops of a saturated solution of orthoform in eighty per cent alcohol; a dry compress is then placed over it. They found the last plan the best; the analgesia is effected much more quickly; the burning sensation is less and of shorter duration, and to the beneficial action of the orthoform is added that of the alcohol. Cicatrization was generally complete in four to five days without any interference with suckling; by other methods cicatrization takes ten to twelve days even when nursing is suspended.—*British Medical Journal.*

Special Notices.

SANMETTO IN GENITO-URINARY DISEASES AND AS A RE-BUILDER.—I have used Sanmetto in a great number of genito-urinary diseases, also as a builder of strength throughout the genito-urinary tract, always with the happiest results. This is the first and only testimonial I have ever given in twenty years' active practice of medicine.

G. H. ECKERT, M. D.

Marion, Ind.

UTERINE DERANGEMENTS.—I have used Aletris Cordial in my practice for over a year, and to say that I am pleased with it does not nearly express the degree of my satisfaction. Aletris Cordial fills a long-felt want with me. Symptoms attending uterine derangements have always been perplexing to physicians, but with this remedy the trouble vanishes as dew before the rising sun.

Georgiana, Ala.

L. M. McLENDON, M. D.

NERVOUS PROSTRATION.—My son, aged twelve, had been growing nervous over the shock of his brother's death, and seemed to derive no benefit from any remedies used in his case. Had him to the seashore, change of surroundings, and every thing that could be done for his benefit; he still grew thinner and worse all the time. I put him on Celerina, and had marked benefit before the first bottle was used, and he has almost entirely gotten over it with the help of another bottle I got for him. I consider it a very nice and efficient nerve, just the thing for the children and nervous and delicate persons, where there is great prostration. I shall use it freely.

Moosic, Pa.

N. P. FRASSONI, M. D.

WARNER'S POCKET MEDICAL DICTIONARY.—Warner's Pocket Medical Dictionary is an up-to-date work in every sense of the word. The latest medical terms have all been added; 10,400 words, terms, and phrases are spelled, pronounced, and defined. The definitions are concise and comprehensive; type bold and easily readable; paper and binding neat and especially serviceable; bound in flexible leather, round corners, colored edges. Complete tables of arteries (6 pages), bacilli, spirilli, streptococci, micrococci, bacteria (11 pages), muscles (24 pages), nerves (12 pages), dose table (14 pages). This latter comprises a complete list of all drugs, with their doses arranged in apothecaries' measure, and their metric equivalents. Every one of its 413 pages is well written, and will prove a valuable addition to the library of quick reference books of any physician. It will be sent to any address upon receipt of 75 cents, stamps or money order. Address,

W. R. WARNER & Co.,
Philadelphia.

A WANT FELT AND FILLED.—If the doctor had never accomplished any thing more definite in his life-work than the relief of pain, than amelioration of human suffering, he would not have lived in vain. It is all very well to say that pain is physiological; that it is the cry of the nerve for more blood, yet its continuance can not be borne by the patient, even by the most heroic Spartan. Long continued pain is dangerous, and while, of course, we never wish to obtund and remove it so completely as not to be able to ascertain its cause and remove the same, yet the best interest of our patient requires from time to time the administration of that which is opposed to pain. Remedies like opium, which relieve the pain and at the same time are exhilarating and alluring in their effects, are most oftentimes dangerous in the remote demoralization which they produce upon our patient. A remedy for the relief of pain which does not tie up the secretions, which carries with it no exultation and no fascinations which tend in the direction of developing drug habits, is a desideratum. Five-grain Antikamnia Tablets certainly meet this necessity. Antikamnia is also more prompt and decided in its action in labor than opium, and has none of the unpleasant after-effects. It may be continued in smaller doses to control after-pains, and rather favors than interferes with the secretion of milk.

THE
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"*NEC TENUI PENNĀ.*"

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

NEW ARTS IN PRACTICE.*

BY WM. B. DOHERTY, M. D.

Sepsis, asepsis, and antisepsis, germs and germicides, cures and curers—subjects which embrace almost the whole domain of medical science—will be briefly considered in the limited space of a paper devoted to some of the new arts in practice.

Dirt and darkness, in the broadest and most comprehensive signification of the terms, are the chief factors in the causation of disease; and pure water, pure air, pure food, pure soil, and sunshine are the best measures for its prevention and relief. Cleanliness, persistent, yea, eternal cleanliness, is next to godliness, and is the price of safety. The advantages of asepsis by warm water alone, and antisepsis by the use of chemical agents for the prevention or destruction of pus, have been carefully considered and zealously discussed by their respective advocates.

For some time the profession paid homage to the germicidal properties of carbolic acid, but later the great king hydrargyrum bichloride appeared as an annihilator of germs, and has held sway, though it may be possible within the next few years we will turn back and recognize in the inorganic proximate principles of salt and water the best and safest disinfectants we possess. The germ-hunting theorist, who believes that he sees through the microscope myriads of death-dealing bacteria, has a very plausible solution of the cause of all the ills that flesh is heir

* Read at the meeting of the Kentucky State Medical Society, Louisville, May 19, 1899.

to, and believes that by killing the bacteria the disease is subdued. But alas! the water we drink, the air we breathe, the earth we tread upon teem with micro-organisms. What good or harm they do is not so well known. Bananas will not grow in Alaska; the products of the sunny south will not mature in the extreme north, nor will the constitution of the individual who has a good inheritance and proper food, air, and exercise be easily affected by those much-dreaded microbes.

It would appear that while so much fascinating investigation and learned research have been devoted to the study of the genus *bacillus* and its habitat, the genus *homo* and his environment have not received the same degree of careful thought and scientific solicitude. To render man invulnerable to the ravages of disease, it must be conceded that the great demolishers or devourers of germs, the worthy fortifiers of our constitutions, the great navy of infinitesimal cells, the wandering phagocytes that are continually fighting our battle in the blood — truly the sea of life — must have their armament strengthened by giving the system pure air, good food, and healthful exercise. Vital resistance, which is mainly the product of seed, soil, and surroundings, must be increased rather than lowered by the artificial methods of living which now obtain if the attacks of our great foes, the infinitesimally small and numberless microbes, are to be rendered innocuous. While recuperative or curative treatment by such artificial agents as bactericides is almost universally practiced in cases of phthisis, the great plague of the human race, hygienic means are not so rigidly or persistently enforced.

Cure! cure! cure! — the piteous appeal of the weary sufferer has always been the talisman of the vender of nostrums and the trade-mark of the impudent quack. There is possibly no word in the English language whose scientific meaning is so little understood by the laity as the word "cure," which, derived from the Latin *cura* (care), means to care for properly. There is no positive cure or specific for any disease, though the efficacy of medicines can not be questioned. The existing condition, the constitution, the weak points of the organism, must be attended to, each case being a law unto itself. As the quantity and quality of life are indefinite and unknown, it follows that from uncertain premises certain results can not be obtained, nor can cures be guaranteed. The mystery of life makes its duration always a matter of uncertainty. None may even lay claim to a knowledge of its tenure for a single hour. The pilot can steer the ship, but he can not quell the

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storm; the agriculturist can sow the seed, but may not reap the harvest; the physician can prolong life, but may not prevent death. While the profession of medicine is of the highest calling in the sphere of mortal life, its dignity and usefulness have been assailed and impaired by the low arts of boasting and cunning and the wily advertising schemes which now prevail. The late Dr. Oliver Wendell Holmes said that "quackery hobbles on two crutches—the tattle of women and the certificates of clergymen," to which we may add the testimonials of politicians and their pictures in the papers. Religious journals will advertise and publish statements of "sure cures" from church divines that are calculated to mislead and delude the people. It is unfortunate that clergymen will allow their names to be used for such objectionable purposes. There are quacks within the profession who will write articles paid for by drug firms, extolling the virtues and curative properties of their medical preparations without even having tested any of them. There are medical journals, established for mercantile purposes, padded with many untruthful advertisements. They contain medical literature as fanciful and untruthful in its expression as the tales of Gulliver's Travels or of the Arabian Nights.

The code of ethics, which has been designated as the doctrine of correct manners, or that of philosophy, which defines the principles of professional conduct, has been vetoed by *ego*, the coat-of-arms of many physicians engaged in the art of trumpeting their reports of successful cases, while the potent influence of the *vis medicatrix naturæ* is not recognized.

The profession is at present overburdened with false specialism and too many young and inexperienced physicians playing the rôle of "specialists." The honest specialist, who, after years of experience in the general practice of medicine, may have acquired a practical, all-round knowledge of disease, has a taste for some special line of work and thought, and prosecutes his studies in that direction, is worthy of all credit and credence. But man is not made of eyes, ears, muscles, bones, or nerves separately, nor can we recognize him as a machine only. The heart is more than a mechanical pump; the lungs far superior to a bellows. The brain is not an electric power-house, and the human being can not be disconnected and disintegrated by a mechanical device or a "trick of the loop" and distributed to the chief artisans of various workshops. No; there is a beautiful interdependent and harmonious action existing between all parts of the human system.

The specialist who devotes his attention to the eye can never be a good physician unless he fully understands that the affection of eye which he treats may be due to a constitutional disease, and be treated accordingly. The appendicitist must not be an exclusivist, an incisor of the bowel, or the worshiper of a detached idea. The family physician is the safest to employ, and should be first consulted in all cases of disease before seeking any specialist. Should he detect a diseased condition that may require more dexterity of manipulation or the skill of a craftsman, he will gladly seek counsel, and the knowledge derived from his experience in treating the family, the inherited weakness of individuals, or the special knowledge of the case will be necessary to the successful labor of the specialist.

We find in the thirty-eighth chapter of Ecclesiastes the profession of medicine approved by God, and the fourteenth and fifteenth chapters of Leviticus treat of hygiene; so the scientific view of specialism is given in St. Paul's letter to the Corinthians, Chapter twelve, verse twenty:

"For as a body is one, and hath many members; and all the members of the body, whereas there are many yet there is one body; for the body also is not one member, but many. If the foot should say 'because I am not the hand, I am not the body'; is it therefore not of the body? And if the ear should say, 'because I am not the eye, I am not of the body;' is it therefore not of the body? If the whole body were the eye, where would be the hearing? If the whole were hearing, where would be the smelling? And if they were all one member, where would be the body? And the eye can not say to the hand: 'I need not thy help.' Nor again the head to the feet, 'I have no need of thee.' And if one member suffer any thing, all the members suffer with it."

Man is the dupable animal. Quacks in medicine, quacks in religion, and quacks in politics know this, and act on this knowledge. There is scarcely any one who, like a trout, can not be taken by lures. There are quacks of all kinds, from the most ignorant to the highest type of intellectuality. The habit doctor, who "cures" the whisky habit, the tobacco habit, the morphine habit, the cocaine habit, is possibly the latest addition to the ranks of quackery. How any person of reason can comprehend why a physician should give medicine for the "cure" of a habit surpasses all belief. Suppose that I am a victim of the whisky habit or morphine habit, and present myself to one of those quacks for "cure." I tell him I am in good health, and he, thinking

himself able to make an examination of my physical condition, finds that my heart, liver, lungs, brain, kidneys, nervous system, etc., are healthy. Why, then, should he give me any medicine? He might as well give medicine to prevent the habit of swearing, as to give a healthy person medicine for the cure of any habit. Of course, when there is an abnormal condition of any organ, or of the nervous system, it becomes necessary to use remedies for relief. This quack boasts of having a secret remedy for the purpose of strengthening the will-power. How can he tell what is involved? Habit means custom, fixed custom, not an entity, and as it may not show any perverted condition of nervous tissue, or of any organ, its treatment under those circumstances is the sheerest nonsense. Why not take the chloride of gold or the sulphate of strychnine for the habit of telling falsehoods? The opium and cocaine habits are alarmingly on the increase. I have made inquiries of druggists in different portions of the city, and from their statements I am led to believe that at least two thousand, and probably four thousand, people in Louisville are addicted to the use of opium and cocaine. It may be presumed that the same ratio to the population exists in other cities and towns, but probably not so great in rural districts. How often is the pleasing physician to blame for encouraging this enthralling, crushing, and blighting habit by the unnecessary use of morphine, given by the mouth or hypodermatically, simply because some patients demand a sleep-producing or pain-relieving medicine, irrespective of any contra-indication to its use that may exist. The accommodating druggist is also deserving of censure in refilling, for an indefinite period, prescriptions containing opium without the consent of the prescriber. The hypodermic syringe is getting to be a dangerous popular household commodity, especially in high-strung and fashionable families. The physician who orders a hypodermic syringe and morphia tablets to be used by the patient is guilty of the act of a dangerous criminal. The unfortunate victim of the opium or cocaine habit seems to be in a more depraved and irretrievable condition than his brother in misery who is a slave to the habit of alcohol.

The habit of self-medication causes far more deaths every year in our country than the carnage inflicted on both sides during our recent war with Spain. Our gambling propensities as a nation are shown in the worst light when we gamble on our lives. The digestive tract appears to be a slot-machine, into which its possessor takes pleasure in thrusting any preparation with a euphonious name suggested for the

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"cure" of disease in newspapers, in circulars on our door-steps, on posters on the dead walls of cities, in the street cars, on the fences along the line of travel, yea! on the mountain-tops, to delude the healthy or seeker of health from enjoying the advantages of such a salutary region. A morbid hysterical condition often results in many people by reading and studying flaming and picturesque notices regarding their nerves, livers, hearts, kidneys, etc. Laboring under the delusion of being ill, thousands will unnecessarily take drugs without consulting a physician—try their luck in "cures" as they would in cards at the faro-table—and become dyspeptics, neurasthenics, and inebriates in consequence. Instead of obtaining the best remedies and advice from those qualified by education and experience to bestow them, people will pour drugs of which they know nothing, into a body of which they know less, and will try, and keep on trying their luck as long as the pleasing advertisements appear, to be changed only when a more alluring picture and catchy testimonial of a "sure cure" presents itself—4, 11, 44, you pay your money and you take your choice. A veritable lottery on life! The great lottery drawings of the world will give a list of the few big prizes that are won, but the names of the thousands and thousands who did not succeed in getting any thing are not intended to be known by the emotional and foolish creatures who invest their money in such gambling schemes. And so it is with patent medicines. The multitude whose constitutions are really injured, or who received no benefit whatever from those nostrums, are never heard of. "Foolery, sir, does walk about the orb like the sun; it shines everywhere." How fortunate it would be for humanity if the tons of headache powders, the barrels of blood-purifiers, and the hogsheads of liver pills were thrown into the sea rather than into the stomachs of people by men who scarcely know the name of a bone or muscle or the function of a single organ of the body!

We have many myopic theorists within the profession who, like limpets attached to the rocks, know nothing of what is going on beyond their own shells or habitations. There are experimental doctors who try every new fad and mechanical appliance and remedy that appear in the journals, in order to be recognized as *fin de siècle*. This so-called up-to-date doctor is usually the greatest humbug that exists. Something new, but not necessarily true, the people want, and why should he not be the man to give it to them? He may be a "curer" by massage, electricity, or oxygen, the stomach-tube or the X-rays, or what-

ever may be the fashion of the moment. He exaggerates the importance of every new nostrum or mechanical device.

The advantages of hospitals for operative work, surgical rest, and rational medical treatment can not be questioned, but there is some danger "of goodness growing into a pleurisy and dying of its own too much," resulting in a condition of hospitalism and institutionalism, especially among the neurotic. The enervating influences due to lack of employment, vicious luxury, and indoor life among those not confined to bed in such institutions tend to lower vitality, and may increase degenerative traits and hysterical tendencies. The abuse of massage and electricity, by lessening will-power, may produce a condition of prudishness and morbidity by magnifying the importance of peccadillos into grave physical conditions. Our own lamented Dr. Cowling characterized massage as a great remedy for those that are well but will not take exercise, and are not too lazy to lie down and be rubbed.

The pendulum must swing back from the enervating artificialities of modern living to the plain and healthful simplicities of nature, from tentative instrumentation and drugging for the "cure" of disease to rational individual treatment on broad lines, if the invalidism which characterizes the people of our present civilization be prevented. The operative part, the instrumental aid, or the dose of medicine is generally attended to, while the habits and habitation of the patient, his food and drink, do not usually receive the consideration which their importance as factors in the treatment deserve. Three minutes without air, three days without water, or three weeks without food usually result in death. Air may, therefore, be considered as the chief thing that the body wants, though it is true that we can not live on air alone, but require food and drink. Yet the dangers of air-sewage, or rebreathed air, as an insidious poison in public places, churches, schools, and stores are not fully recognized by the laity. While municipal legislation in the matter of cleanliness is principally confined to filthy gutters and alleys, whose obnoxious odors wound the sensibilities of our olfactories, we have not yet progressed so far as to include the close and corrupted air of stores and factories as a menace to our health. Probably the most important question in hygiene that confronts the people, especially of the cities of this country, is that of air, sufficiently pure to give more red blood, better digestion, and invigorated muscular and nervous systems. Many of the large department stores and offices, with their artificial modes of heating and ventilation, are nothing more than disease-

breeding colonies, owing to their lack of fresh air. Our sky-scraping buildings may present thoughts and ideas of modern progress to the eye of the business man, but to the physician many of them are insidious death-traps. Sunlight and sunlit rooms are at a discount in the houses of commerce and trade. Hotels are built so that the modern troglodytes who live there must eat, drink, and sleep, and use the least possible amount of exercise, and inhale as little air as possible. Electric lights, that are really dark with excessive brightness, burn brightly at noon-day in the basements and offices of hotels and business houses, and Holy Light, offering of heaven, first born, solar light, is excluded. In the summertime the atmosphere of those luxuriously-furnished apartments have, owing to their peculiar construction, a close, debilitating, and stuffy atmosphere. In winter a temperature of about eighty degrees pervades those buildings internally, while the mercury is many degrees below the freezing point out of doors. The unfortunate cave-dweller who lives under such conditions can not continue in the possession of good health for many years. Such an existence does not tend to longevity. The tendency in the present fashionable style of architecture in our cities is, unfortunately, to minimize space, rooms being made very small, and windows so arranged as to exclude the air to a great extent. How few patients who consult a physician deem the question of pure air of any importance as a remedial agent to strengthen their debilitated constitutions! Many of the wage-earners of our cities, but particularly women employed in stores and offices, are underfed, owing to lack of proper respiration—the last act in the process of digestion. The shop girl who hurriedly eats a piece of bread and butter and takes a cup of coffee for breakfast enters the street car, crowded almost to suffocation by persons going to their different places of employment, and incarcerated afterwards for hours in a business dungeon or a close workshop, without having the privilege, perhaps, of resting her weary limbs, even for a moment, has little appetite for her scanty lunch, and less for the evening meal when she returns home fatigued and exhausted. Lack of fresh air, proper exercise, and sunlight render her an easy prey, owing to the lessened power of vital resistance, for the germs of consumption to feast upon.

The limited space of this paper will not allow a notice of the importance of water, food, sunlight, and exercise in the treatment of disease.

The physician deems it better to get his patients well with little or no medicine, if possible. He will carefully avoid using the word "cure."

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While the number of remedial agents given in the books are legion, yet he selects only those that have been tested and found to be trustworthy and reliable. He partakes of the spirit of the artist. The quick eye, the observant gentleness, the sympathizing heart, the seizing of the actual circumstances, the impressionableness to all that is soft and winning and lovely and weak and piteous—these belong to the true physician as well as to the true painter. He is an official minister to human sorrow, and recognizes in his professional work the highest type of duty, of man's humanity to man.

LOUISVILLE.

TRAUMATIC TETANUS.*

BY JOHN A. LEWIS, M. D.

In the brief presentation which I shall make of the subject of traumatic tetanus, I shall present you nothing new or startling—nothing which has not been often said, and better said by others who have preceded me in the consideration of this subject.

An interesting question in the investigation of any disease is its origin, whether the result of edict or accident; a question which has puzzled, and is likely to puzzle, the theologian, the philosopher, and the physician for all time. Perhaps equally as interesting, and certainly more important, is the question of treatment, but paramount to both of these is the subject of prevention.

In my investigation of traumatic tetanus I can not hope to throw any light upon its mysterious origin, nor can I help you much upon the subject of treatment; but upon the more important phase, that of "prevention," I trust that I shall at least be helpful. Indeed, in my estimation, it matters little to us whence or how came the disease if we can answer the more vital question, how to rid ourselves of it. The old methods of treatment—and I speak from experience—having run through the entire rôle time and time again, from calabar bean to chloral, are absolutely valueless. The new treatment by antitoxine injections is as yet on trial, and those of you who have oftenest met this old adversary on the battlefield will be the slowest to accept the new treatment as a sure cure until thoroughly tested by honest and competent observers.

Tetanus is one of the oldest ills of the flesh, old as Hippocrates, vividly pictured by the Father of Medicine, fatal then, fatal now. The

*Read before the Kentucky State Medical Society, Louisville, Ky., May 18, 1890.

burden, then, of this paper shall be not how to cure the disease, as yet a hopeless task, but how to prevent it.

During the earlier years of my practice, which began thirty years ago, it was not an uncommon thing for me to meet with cases of traumatic tetanus. These cases generally had their origin in punctured wounds from nails or splinters, or from contused wounds, or from gunshot wounds, or from badly lacerated wounds, or from wounds from which the foreign bodies had not been removed. The offending cause was sometimes pieces of clothing carried with the ball, sometimes shot left in the wound, sometimes splinters, sometimes broken pieces of glass. I am sure that I am accurate in the statement that in the first twenty years of my practice I saw not less than twenty cases of traumatic tetanus in my own practice, or in consultation with other physicians in my vicinity. During the last ten years I remember of but one single case that has fallen under my observation. This occurred during the past summer, and occurred in the person of a lying-in woman, following an instrumental labor, three weeks from the date of her confinement. She had seemingly entirely recovered; every abrasion of the surface had apparently healed. The patient had been discharged as well, when the symptoms of tetanus developed. She died three days from the time of seizure.

The occurrence of this unfortunate case had the effect of bringing the subject vividly before my mind, resulting in an investigation of the subject, and, incidentally, resulting in this paper.

In my investigation of the subject the first thing which arrested my attention was the apparent dropping off of the number of cases in the last ten years of my practice, as compared with the preceding years.

Now, am I right in my observation, that cases of tetanus are of less frequent occurrence now than formerly? I am sure such is the case in my own practice; whether it is a fact in the case of others or not I do not know.

I am aware that tetanus has always been a comparatively rare disease, and yet I am of the opinion that investigation will show that I am correct in my statement. I only wish that I had had the subject sufficiently long under consideration to have collected data from which I might have adduced accurate statistics bearing upon the subject. In my opinion there are several reasons why we might legitimately expect a decadence in the number of these cases. The first and most prominent reason is, that with the more general and extended use of

anesthesia we are able to do better and more complete surgery than formerly.

The second reason is, that under the influence of modern surgery, as now almost universally practiced, wounds after being freed from all foreign substances are rendered thoroughly aseptic before they are dressed.

In the third place, the pathology of the disease has been entirely rewritten, enabling us to act intelligently in preventing the disease. If you will recall the fact that the wounds which are more largely followed by tetanus are the punctured wounds—wounds from splinters, from rusty nails, wounds from pieces of glass, wounds that do not drain, contused wounds, lacerated wounds, gunshot wounds, wounds in which foreign bodies are retained—you will better be able to appreciate how modern surgery, under anesthesia, would insure more favorable results than under the old régime.

These wounds (many of them seemingly trivial) all require surgery to rob them of their seriousness. Formerly the pain attending the necessary incisions and explorations deterred both patient and family from any interference, and, with the application of some simple ointment or lotion, the wound was left to take care of itself. Thirty years ago the administration of chloroform or ether was not nearly so general as now. The practice of administering an anesthetic, except for the most important operations, was looked upon as extra hazardous. The majority of the profession were loth to administer anesthesia except in extreme cases, and when it was done it was with the gravest apprehension. The laity were strenuously opposed to the use of anesthesia, and would not consent to its administration except in the most dangerous cases and unavoidable conditions.

Surgeons were not nearly so abundant as now; perhaps not more than one physician in each county town made any pretensions to the practice of surgery. The general practitioner rarely performed surgical operations of any importance. Indeed, he seemed quite content to be free from the responsibility which accompanied the practice of surgery, and when he called a consulting physician he rather enjoyed the spectacle of seeing him tread the wine-press alone.

As a natural result of this state of things, the majority of wounds which I have enumerated as most liable to be followed by tetanus were left to take care of themselves. Drainage was not established by free incision; pus was allowed to accumulate and burrow; wounds were

so dressed as to favor infection; foreign bodies were overlooked or left to be drawn out by some favorite poultice of fabulous drawing power, suggested by some neighborhood male or female wiseacre.

All these things favored the production of tetanus. Now the surgeon (and as the result of advanced methods of teaching and increased requirements for graduation and post-graduate schools every community is well supplied with excellent surgeons) promptly and fearlessly anesthetizes the patient, carefully explores the wound with his eye and his finger—not with the probe, for the probe, having served well its day and generation, has “fallen on sleep”—removes all foreign bodies, renders the wound thoroughly aseptic, establishes drainage, then puts the wound up in thoroughly sterilized dressings. A few years have wrought a wonderful change, especially in the management and treatment of wounds. The laity have been educated to understand that anesthesia is absolutely necessary for thorough surgery, and that the dangers attending its administration are not as great as those which we encounter every day in riding in a buggy or on a railroad train.

The general use now of anesthesia has robbed surgery of its terrors, opening the way for better and more thorough work. Asepsis has done the rest; and this statement speaks volumes, for no human power can estimate what has been accomplished in saving life and limb by the promulgation of the doctrine of asepsis as applied to modern surgery. The doctrine of perfect purity in dealing with wounds now seems so clear and simple that we wonder that a Lister had not arisen hundreds of years ago to have blessed the human family; and yet it has been left to our day and generation to witness the promulgation of a truth, the most simple and yet the most potent in the realms of human knowledge.

What can be more simple than the doctrine of asepsis? When summed up, it means nothing more nor less than the free and thorough application of hot water and soap—things with which we are supposed to have been slightly familiar all the days of our lives. How simple, and yet how potent! What a complete revolution has been wrought in the science of surgery in the last decade by this simple means! If the giants of medicine and surgery of half a century ago could step into one of our modern operating-rooms of to-day and witness the advances made in the domain of surgery—progress made possible alone by the teaching of Lister—they would simply stand dumb with amazement. They could not believe their own eyes. They would involuntarily

give utterance to that lofty sentiment which animated the soul of the immortal Morse, when, with his great heart filled with expectancy, he transmitted the first words which ever passed over the electric telegraph: "Behold what God hath wrought."

The marvelous changes which have been wrought in the last quarter of a century have entirely altered the statistics as regards the frequency of traumatic tetanus. The scope of this paper does not include idiopathic tetanus, that form which is produced by causes other than wounds, generally exposure to atmospheric changes.

Tetanus presents itself under two distinct forms, either acute or chronic. The prognosis in these two varieties differs very largely. The acute form, or that which follows within a week or ten days after the reception of the wound, is violent in its convulsive manifestations, and is fatal in the vast majority of cases.

The chronic form generally ensues upon old injuries, which have nearly passed out of mind, such as frost-bites or old ulcers. Patients afflicted with this form of the trouble very often recover. I have myself seen one or two cases get well following this variety. I am of the opinion that the treatment has but little to do with the recovery; time seems to be the prime factor in bringing about the result.

Tetanus seems to be influenced by climate; the hot climates are more favorable to its production than the cold. Certain localities seem to favor the development of the disease. The black race seem more liable to it than the white. This may perhaps be accounted for by the fact that they are largely farm employes, and liable to have hands and feet infected from the soil.

Wounded soldiers, who have lain on the battlefield all night without protection, are prone to develop the disease. Until a few years ago the disease was looked upon as a nerve lesion, an ascending neuritis involving the spinal cord. In 1885 Nicolaier discovered the bacillus of tetanus of the soil; in 1886 Rosenbach demonstrated its presence in man. Since these discoveries the disease has been classed as an acute infectious disease. The bacillus is described by the investigators and writers on the subject as a slender rod, with an enlargement at one end produced by the presence of a spore, rendering the appearance of the bacillus much like that of a drumstick. It is most frequently found in garden earth, gardens being generally manured from the stable, but sometimes in virgin soil, in street dirt, in the excrement of animals, especially horses. It grows rapidly at a temperature approx-

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imating 100 degrees. The spores resist a high degree of dry heat for one hour, but are killed by a few minutes' exposure to moist heat at a boiling temperature.

The bacillus of tetanus is anaerobic (can not live in the presence of oxygen), hence the indication for incising freely all punctured wounds, allowing free access of oxygen, thus favoring the destruction of the tetanus bacillus. It is found in excrement of horses. This explains why wounds received by men about stables are more liable to produce tetanus, and why horses are more liable to tetanus than any other animal. It is found in dirt of streets and garden earth, and even in virgin soil. This explains why all wounds of the extremities, especially feet and hands, exposed to dust and dirt, are particularly liable to be followed by tetanus. It is estimated that three fourths of the cases of tetanus result from wounds of the extremities.

Now, if this little firebug (tetanus bacillus) is not the cause of the trouble, it is very certainly laid under grave suspicion, since it is found so constantly in the neighborhood of the conflagration. The bacillus of tetanus evidently enters the circulation through some abrasion of the surface, and yet it disappears from the point of inoculation in a few hours, and has rarely, if ever, been found in the blood or tissues of a tetanic patient.

It is impossible for tetanus to develop without inoculation through a wound, although the wound may be obscured. The bacillus does not seem to prevent the healing of wounds, and the wound may be closed before the disease makes its appearance. The period of incubation in this disease is one to two weeks, usually about one week. The presence of the bacillus produces several toxins which constantly produce the disease when injected into the healthy animal.

Perhaps the first and most prominent symptom indicating the onset of tetanus is stiffness in the jaw from rigidity of the masseter muscles, also rigidity and pain in muscles of neck and spinal column.

The first indication which I have noticed in many cases is a feeling on the part of the patient of apprehension, as if something was impending, and yet not able to say just what. I have also noticed that rigidity of the recti muscles was one of the earliest symptoms, perhaps in some cases preceding the stiffening of the jaw and pain in muscles of back and neck. The muscles of the side corresponding to the wound are perhaps the first to become affected. The muscles are in a state of tonic contraction; added to this are paroxysms of clonic spasms, or

convulsions, excited by noise or slamming of a door or breath of air. The patient during intervals is free from pain, lies quiet, often bathed in perspiration, with a worn and exhausted look. The peculiar grin produced by contraction of muscles about the mouth is a familiar picture to all, also the violent spasmodic contraction of the patient, drawing them back, forward, or sidewise according as this group or that group of muscles is involved. The temperature ranges from 100 degrees to 110 degrees; in some instances temperature rises after death; pulse rapid and weak. The intellect generally remains clear to the last. The patient is sleepless, rapidly emaciates from inability to take food and from profuse perspiration, the perspiration being the result of violent muscular contractions. Very few cases recover. Perhaps ninety-five per cent die. They rarely live beyond two or three days from seizure, and usually die from asphyxia.

The old method of treatment of tetanus by chloroform, bromides, calabar bean, morphia, chloral, etc., availed but little. Under the old pathology, which looked upon the disease as an ascending neuritis involving the spinal cord, wounds were incised, actual cautery used, limbs amputated, etc., hoping in this way to sever the nervous reflexes originating in the wound. This treatment has been largely abandoned as founded upon false pathology.

The treatment now consists in caring for the wound at once, according to the principles of modern surgery; that is, the wound must have all foreign substances removed, drainage established, rendered thoroughly aseptic, and put up in aseptic dressings.

Since Tizzoni and Cottani discovered the curative effects of the antitoxine of tetanus, the treatment has been conducted along this line. The protective serum is obtained by injecting animals, either dogs or horses, with pure culture of the germ until they become immune, and drawing blood-serum from them. This serum is used by hypodermic injection. Twenty-five centigrams are injected twice daily. Such improvement is expected to occur within one week as to render further use needless.

Cures have been reported by this mode of treatment, but most of these cases belong to the chronic form, and are the same class of cases which we saw recover under the old treatment, and not those following acute wounds. The method is still on trial, and while much is to be hoped for it, nothing is yet certain. The only case which I have had in my practice since the serum-therapy has been brought to

notice was treated by this method, but to no avail. There can be no question that tetanus can be best treated by prevention, "and fortunately the asepsis of modern surgery appears to be able to prevent probably as much by rendering wounds unfavorable to its development as by actual destruction of the germ."

If this paper should serve the purpose of enforcing upon every surgeon the necessity of submitting every wound which should come under his purview, no matter how trifling, to the strictest rules of modern surgery, I shall feel that I have contributed my mite toward banishing an enemy with whom we have thus far failed to battle successfully.

GEORGETOWN, KY.

THE PRACTICAL TREATMENT OF TYPHOID FEVER.*

BY BASIL M. TAYLOR, M. D.

You will pardon me, gentlemen, if I ask your indulgence in a paper on a subject that has been written threadbare in every medical society. Few indeed are the programmes that have no paper upon this disease. Though discussed by all, we have only approached the land, anchored in a small inlet, and picked up a few pebbles along the beach of knowledge, of typhoid fever.

As typhoid fever is a self-limiting disease, we can not abort or even cure it. Those cases that are aborted are not typhoid fever. We are only nature's assistant, or else we are *particeps criminis*.

In our treatment of disease we occupy one of two places—we either aid the patient or the disease. There is no neutral ground, unless it is outside the patient's house.

When you weigh this statement carefully you will find it the truth. Every dose of medicine requires some antagonism. When the body is at war with disease, struggling for the survival of the fittest, every dose the patient takes necessarily occupies the attention of the organs of elimination.

Toxines and medicine alike pass out together. Then, if our remedy is an irritant, upon which side do we stand? An enemy under false colors? These organs will quickly give you the alarm if you are firing at your own men. Pills and bullets are blind, and therefore wound friend and foe alike.

* Read before the State Medical Society, Louisville, Ky., May 18, 1899.

The coma vigil, wild delirium, thready pulse, revolting stomach all point with unerring finger to the mistakes in doses and diet. When the poor, miserable patient has the disease and the doctor both to fight, he deserves promotion if he survives the desperate attempts of both to kill.

You may think this a little harsh, but when you recall the lingering cases of typhoid fever on your list, you may well say that ninety per cent could have been different. I do not mean those cases that have had Bright's disease or some chronic troubles that have already a closed mortgage on the patient, but those cases that begin with typhoid fever.

The course and duration of a case of typhoid fever depends upon the physiology and pathology of the patient and our conduct. We all have the title of Doctor of Medicine, but in typhoid fever we are not doctors, but judges. We hold the same relation to the disease and patient as "his Honor" does to the plaintiff and defendant. We are not called upon to give medicine because we have that privilege, but to sit at the bedside and judge, as it were, the issues as they are presented; in fact, to keep out factions and party jealousy among the organs, and to bring the case to trial between germs and patient.

This means more than using the thermometer, feeling the pulse, or looking at the tongue; it means more than using text-books as our compass. Each day of the disease is a day unto itself. The disease is divided into stages of weeks, but we must divide it into stages of days. Each day gives you light upon that day only.

One has wisely said "the proper study of mankind is man." To be successful, then, "know your patient." Unless you do, he will not know himself long. When called to see a case of typhoid fever at any stage, open the journal and examine carefully his liabilities and assets. Like love, that levels all ranks and hides a multitude of faults, there is one word in our language that covers all knowledge, though it be always hidden. This word is "why." It is the Alpha and Omega in all consultations; it is a question I ask myself about every symptom. At every bedside I am always twins, and we hold a consultation.

Is the patient older than his age? If so, why? Is he anemic or plethoric? If so, why? Is his temperature too high? If so, why? Is his pulse too strong, too weak, or too quick? If so, why? Is he nervous, full of pains and aches? If so, why? Is his tongue foul, his bowels too active? If so, why?

There is no necessity for foul tongue, delirium, sick stomach, pains, headaches, insomnia, high temperature, and weak pulse in typhoid fever. If we will practice physiology instead of medicine we will avoid these. The sum total is, when you get a typhoid fever patient in bed, give him a rest; I mean a rest from the crown of his head to the soles of his feet. There will be a drain on the system—a disturbance of the equilibrium between assimilation and waste. The patient lives on himself to a certain degree. Then we must minimize waste in every organ.

The patient's mind must not be upon his business; if he has been irregular in his habits, we must at once establish a regularity; in fact, we must, as nearly as possible, reorganize his organic harmony and let each organ do its work.

I have given you a few general principles preliminary to the treatment of a case of fever. I will now enter into the treatment in detail. When I say in detail I do not mean the treatment of typhoid fever in general, but the treatment of the patient.

Let us divide our cases into two classes: First, those who are healthy prior to the acute disease; second, those who have had a chronic disease for years. In the first class we are at an advantage, and in the second we are laboring under great difficulties.

CASE "A" is in the first class. He is a young man of twenty, and a perfect type of physical manhood; he has been complaining for a week, and has called at the doctor's office several times for medicine; once or twice he found him with a degree or two of fever; he was given calomel for biliousness and quinine for possible malaria. He gradually grows worse, and after having a restless night with headache and general pains, he sends for the doctor. Here is a chance for a brilliant success or a fatal and criminal mistake. He has a temperature of one hundred and three degrees; he has had a hard chill; his pulse is rapid but regular, and good volume.

Now for your question, why? The functions of the stomach are threefold—the trinity, as it were. They are digestive, absorbing, and germicidal. To impair one necessarily impairs the other two. Here is the keynote to the whole matter: Keep in harmony with the trinity. The patient has taken medicine irritating to the stomach, and has been eating indiscriminately since the first symptom of his trouble, and the chill, high fever, and headache tell us of the facts.

Allow me to use here a theory for reference: "Give liquid nourishment and stimulants." Here is where we are deceived. Stimulants are

dangerous weapons indeed. "A" is given another purgative, more quinine, and he is directed to take a glass of milk every three hours and a tablespoonful of whisky or brandy every four hours until you return. Have any of you ever been guilty of this mistake?

A stomach when in perfect health can not digest food long, oftener than three times a day. But when the healthy stomach of case "A" takes typhoid fever it needs a rest for the long task it has before it. You cause it to work constantly by giving food every three hours.

What does this do? It breaks the link in the trinity by hindering digestion, and, of course, hinders the absorbing and the germicidal power of the stomach. This is kept up for a week or more until the patient begins to vomit. His temperature is running to one hundred and four or one hundred and five degrees; his expression is dull, and he is delirious; his pulse is growing weaker, and you are increasing your stimulants.

When digestion and the germicidal functions are crippled, germs take charge of the glasses of milk, and the patient poisons himself hourly. Each glass of milk gives impetus to the trouble. No wonder it takes him weeks and months to recover; the disease and the doctor make a combination disastrous to any patient, though he be made of steel. This is where the dull, characteristic expression, the delirium, the tympanitis, the gurgling in the right iliac fossa, the feeble pulse, the emaciation, the aches and pains, the diarrhea come from.

Now about the whisky you have been giving. Here is another mistake. Why? Because the pulse, laboring under the poison from over-feeding, is accelerated. You mistake this for an indication for stimulation. If any of you ride a bicycle or ever walk up a hill you know that the best way to reach the top with little exertion is to walk or ride as slowly as possible, and thus save your energy. But, upon the other hand, if you start from the bottom in a run and increase as you go up the hill you will find yourself exhausted and unable to go further. So it is with the heart in disease. It needs rest instead of stimulation to overexertion. This causes heart-failure, and can not but result disastrously. Let the heart alone; it knows its own business better than we do. Never, under any circumstances, try to stimulate a weak heart's muscles. It only causes exhaustion. I have told you what you ought not to do, so I will now give you my treatment of case "A."

I never give a purgative. Why? Because there already exists an inflammation in the bowel, and it is unsurgical to cause severe muscu-

lar action over any inflamed area. Calomel in this case, then, is unsurgical. If the patient is nauseated, I withdraw all food for twelve or twenty-four hours; then I feed him three times a day, not every three hours. If he is not hungry at the meal time I direct him to wait until he has an appetite. This waiting will not occur very often. His food consists of beef tea, beef steak scraped into a pulp or run twice through a meat chopper and heated gently, crackers rolled fine, eggs either raw or cooked slightly, and soups in small quantities and highly nutritious.

Never allow your patient to eat any thing that he is required to masticate, but always prepare meats and other food so that it needs only to be mixed with the saliva. Then his stomach will digest perfectly the food, and the patient will be nourished and the germs starved, and his stomach will get the needed rest; and then there will be no self-poisoning from decomposed food that passes out of his stomach. Orange or lemon juice at intervals will be grateful to the patient, and will do no harm.

Let all food be highly nourishing and small in bulk and easily digested.

When the temperature runs over one hundred degrees I use as an antipyretic antifebrine. I usually give three doses during the day and one at night, if the patient is at all restless. I do not give medicine until I see a dose is indicated.

If the patient is a little restless for a few nights, I give him a sedative. I like bromidia very well, because it has no bad after-effects. As a rule, patients will rest well if the nurse will not disturb them every two or three hours during the night to give nourishment and stimulants. This is a point that I wish to emphasize: Avoid as much as possible disturbing a patient during the night. Rest is essential to health, and, of course, a patient needs it. Let him sleep until he awakes of his own accord.

If the tongue is dry, I give for a day or two small doses of turpentine in capsules, or else I give a small dose of creosote or carbolic acid and tr. iodine. I have the patient's mouth cleansed three or four times a day, and direct him to chew tulu an hour or two every day until the tongue becomes moist. I direct him to take as much water as the stomach can conveniently absorb. As I pay special attention to the stomach, I do not forget the rectum and colon. These require as much attention as the stomach. I have the colon irrigated two or three times

a day with warm sterile water, and if there has been diarrhea I use boric acid or a very weak solution of permanganate of potassium.

These injections free the lower bowel and prevent any putrefaction or absorption, and thus relieve the system of what gives us that dull, characteristic expression, the foul tongue and sordes upon the teeth, the low, muttering delirium that our text-books call the typhoid state. I have the patient's entire body sponged in warm water once or twice a day. If a bath-tub is available, I have the patient immersed in the warm water, and the bath is kept up for ten to twenty minutes; the body is wiped dry, and the patient returned to bed. A warm bath given at night produces sleep like a sedative. I never use cold water, for it is not grateful to the patient, and causes shock that is unnecessary. I find that warm water has sufficient antipyretic effects. It keeps the skin active. If water is not taken by the stomach in sufficient quantities, I give an injection of about one pint of normal saline solution into the colon after it has been irrigated.

CASE "B." This class of cases gives us much trouble, because we begin the struggle at a disadvantage, but we have an opportunity to use the same care and judgment as in Case "A."

Most chronic diseases are in the lungs, kidneys, heart, or the alimentary canal. I have had consumptives pass through typhoid fever as easily as robust patients, but dyspeptics are a source of worry to the physician.

We must watch digestion with special care. If there is myasthenia with fermentation we must give a very small amount of food, easily digested and slow to ferment. The white of an egg suits this class of patients best. The myasthenia stomach digests it better, and it usually leaves the stomach empty in two hours, and this leaves about sixteen hours' rest for the stomach.

Do not give milk to a patient with weak digestive power. Antiferments may be given if necessary. Bismuth, turpentine, carbolic acid, or two or three grains of chloral act very well. The stomach-tube is the best prevention that we possess. If the stomach is irritable, or there is hyperchlorhydra, give sedatives just before food is taken. A cup of hot water and a large dose of bismuth will usually prove efficient. These cases improve as the food is decreased in quantity and quality. I have found that irritable stomachs with hypersecretions are the result of too much food improperly masticated or insufficiently cooked.

Complications must be watched for, and each met by proper remedies. The colon is irrigated, and the baths are used as detailed in Case "A."

GREENSBURG, KY.

Reports of Societies.

KENTUCKY STATE MEDICAL SOCIETY.*

[CONTINUED FROM PAGE 147.]

"New Arts in Practice," by Dr. W. B. Doherty, Louisville, Ky.

Discussion. Dr. McCormack: It can only be a matter of regret that we can not express and emphasize to our own patients and the social gatherings of our friends exactly the things that have been so excellently presented by the doctor. Every physician must feel the necessity of fair education, not only among our poor people, but among our good people. It is to be regretted that the paper can be read only before an Association like this, composed of members who feel with and for the essayist, and that it can not be impressed upon all the people by such a master of our language as the doctor has shown himself to be.

Dr. L. L. Solomon, Louisville: I would beg leave more especially to impress the members of this Society with the fact that a new nuisance has recently made its appearance. I refer to the establishment by the larger pharmaceutical houses of journals—so-called ethical journals—with therapeutic notes, etc. These concerns make bold to send a journal to the profession throughout the world gratis, or at a nominal price, say a dollar per annum. These journals advertise the articles of the houses which publish them. The journals may bear not the name nor the address of the houses which publish them, but even a fictitious name of some editor, and give as an address some small by-street. It is the duty of the busy practitioner to cull out and ascertain what is good when such a condition of affairs prevails. And I would recommend that we put our seal of disapproval upon such journals by returning them, and informing such houses that we can not afford such literature.

As to opium. It seems that some make bold to sell opium or morphine while they refuse the patient alcohol with which to rub himself without a prescription. In Louisville it is impossible for a patient to

* Meeting held in Louisville, May 17, 18, and 19, 1899.

get five cents' worth of alcohol, but any child can go into a drug store and purchase ten cents' worth of morphine tablets, which may be taken with suicidal intent.

Dr. Early, Paducah: There is one point that I would like to emphasize. Being the son of a minister, and having been associated with ministers of the gospel, I feel like saying one thing for them and one thing about them. They are the most susceptible men on the face of the earth for imposition.

One reason why the country physician and the general practitioner do not send for the specialist is because they are afraid the specialist may be wanting to make a reputation, and will cut when there is no need of it. If the specialists were always more conscientious than we think they are, possibly we would send for them more often than we do.

Dr. Doherty, in closing: The paper was not intended to hurt the feelings of any honest physician, but only to show the great evils that now exist, and to emphasize the fact that indiscriminate drugging and treating the disease without treating the patient should be abandoned as much as it is possible to do so.

"Traumatic Tetanus," by Dr. John A. Lewis, Georgetown.

Discussion. Dr. Lecke: The essayist has given us a splendid paper, and I agree with him in most of the points he makes, but I am bound to say that I can not agree with him in the statement that medicinal treatment is of no avail. Without any notes in reference to the cases that I have had, I call to mind some cases of tetanus that occurred in my practice years ago. One case occurred in a boy some ten years old, who was following after a sickle as the grass was being mowed, to pick up sticks and carry the sickle from the stumps. He caught his toe and fell, and his forearm and wrist were badly cut. I amputated the arm just below the elbow as aseptically as I could under the circumstances. About ten days after the operation was done symptoms of tetanus set in. A consulting physician advised opening up the wound, but I could not find any thing in the wound to indicate that there was any trouble there, although the patient was in a state of contraction of almost all the muscles of the body, and slight rigors were running over him once in a while. I could not bring myself to open up the wound, and I put the patient on heavy doses of bromide of potassium and hydrate of chloral. These seemed to control the nervous symptoms. I kept him

under that treatment about a week, and during that time the recti muscles were contracted so that there was considerable opisthotonos. The masseters were contracted so much that he had to be fed altogether upon fluid diet. The contractions remained almost constantly for about a week. They began to subside about that time, but continued to some extent until the boy was able to be out of bed. He could not open his jaws fully for a good while. But the case went on to recovery, and the patient is still living. The bromide of potassium and hydrate of chloral was just about all that I gave him. In another case, a young man cut his toe slightly with a hoe. He was one of those patients with a hemorrhagic diathesis, and he bled very severely from the slight wound, so much so that I was sent for in the night to stop the hemorrhage. When I took the bandages off and elevated the foot the hemorrhage stopped.

Dr. Early: I have a case I would like to put on record. A little boy, eight years of age, stuck a splinter into his foot. It was a very small one, but he showed the symptoms of tetanus in a few days. All the cases I had seen were fatal, the hydrate of chloral and morphine having been of no avail. The case getting worse, I sent for the antitoxin. Under its use the little fellow recovered. The antitoxic serum cured him, notwithstanding the splinter did not come out for about a week.

Dr. T. B. Greenley, Meadow Lawn: I have seen only three cases of tetanus. One was from a nail in the heel of a young lady, and another was caused by a piece of lead wire. In a third case I was called in consultation. This was an incised wound of the foot. The first two cases I mention got well. The child would have convulsions every hour or two. I had no hope, but kept him under the influence of morphine, and sometimes under chloroform during the convulsions. He had locked jaws. He got well. Only one case died, and therefore I have some faith in the medicinal treatment of tetanus.

Dr. F. J. Yager, Campbellsburg: I did not understand the essayist to say that he would give no treatment, but I understood the essayist to say that the main work we have to do is in the prevention of tetanus. I make no pretension to being a surgeon, but away back there I had a great many cases of tetanus to treat, and what surgery I did I believe I did well. I have had some cases of this trouble that come from wounds, and some seemed to originate in the brain. What caused those cases I do not know, but the disease killed my patients. The only ease I could give was with morphine and chloroform, and the

patient would die under chloroform. I have had them with wounds from nails and incisions and contusions and all that, and I have never lost one of them. If they had gotten a hold such as the doctor describes, I would have had no hope. If the wound was in the heel, for instance, I would cut down, let the blood run freely, and then I would apply warm water freely. If possible, I would put the whole body in warm water, and then I would rub the part with carbolic acid. I would put the foot in warm carbolic acid-water and keep it there all the time, and these cases did not get a firm hold. All the cases I have had I got hold of sufficiently early, and they all recovered. I would use your new remedies now, but I did not have them then. You must not think that because I stick to some of the old remedies that I am going to throw away any of your new ones

Dr. Dugan, Louisville: My cases of traumatic tetanus do not belong to me. They are on the other side. I believe the true treatment of traumatic tetanus is the prevention of it. This is a timely paper, and I consider it one of the most important that we have had. I arise more to express myself in hearty sympathy with it than any thing else. I believe that prevention is the keynote. The old idea that injuries to the hand and foot were more likely to swell up with tetanus was, in the first place, because such wounds became impregnated with the dirt of the barnyard containing the tetanus bacillus; and the reason we have better results is because we open up all wounds and cleanse them, and having gotten rid of the cause of the infection, we do not have tetanus as we used to have it. When tetanus develops, in my mind all hope is lost. Notwithstanding I have always had the best physicians I could get, and they have used the best treatment they knew, the cases have died. There is only one point I would like to make which the doctor has omitted, and that is the use of the peroxid of hydrogen in these cases. He said that the microbe is anaerobic, and does not live in oxygen. Then in all injuries of the hand and foot that are infected with the excrement from horses, barnyard dirt, etc., it might be well to keep them open and pack them with gauze saturated with peroxid of hydrogen.

Dr. McCormack: It has been my doubtful privilege to see six cases of traumatic tetanus in Kentucky; four in Louisville. The first five cases died by the methods of treatment then and still in vogue to a considerable extent. When I had my last case in Louisville I tried the antitetanus serum. We left the wound without packing, but

obtained very free drainage. On the fifth day the patient had six convulsions, and I telegraphed for the serum and got it the next night. The next day he had eighteen convulsions, and that night I gave him 32 c.c. of the serum. I used the French serum to begin with. The next day he had sixteen convulsions, and the next night I used 32 c.c. again. The next day he had eight convulsions, and on the fifth day he had convulsions. After the fourth day I used only 10 c.c. of the serum, and after the fifth day he had only diaphragmatic convulsions. They were very painful, but that was all. His jaws remained locked until the eleventh day, and they were so completely locked that I had to have a tooth cut off, and through that space I poured with the funnel large quantities of fluid. The case was in an ignorant family, and I gave them a little bicarbonate of soda dissolved in a large quantity of water, and had them to pour this into the patient's mouth to keep up the secretion of the kidneys, because in all cases I have seen die there was suppression of the urine. The case made a splendid recovery.

Dr. E. E. Hume: I have heard a great deal about the curative influence of medication. We have heard also of cancer being cured, and we have seen cases where nature has exfoliated the whole cancer and the patient has gotten well. No doubt these cases have recovered, but whether or not they were cured by the medicine is a question in my mind. The value of the bromides was exhausted long ago. I have failed to see very much benefit from any medication, although I have seen two cases recover. But I have some doubt as to whether my treatment had any thing to do with the recovery in those cases. There is certainly an amount of the bacilli in the body already, as well as in the soil that is received in these wounds. It is not always the punctured wounds that are followed by the development of the disease. I have seen one case in an amputation where the patient had been very badly mangled, and some slight sloughing had begun before amputation was performed. Five or six days after the amputation the symptoms of tetanus developed. The stump was dressed openly with peroxid of hydrogen, as the doctor suggested, but still we had the development of tetanus. Sometimes we have the disease, no difference what is done to prevent it. As far as remedies are concerned, I doubt very much their value.

Dr. R. O. Pratt, Shelbyville: This question has a somewhat personal interest to me, and I wish to emphasize Dr. Lewis' position, that no wound, especially of the foot, can be so trifling but that it should

receive prompt and thorough antiseptic surgical treatment. The prevention is every thing in this disease. After a case becomes established the value of medication is practically nil. It has been my misfortune to see three cases in the human and one in the lower animals, and all four died. I have tried the various remedies; the bromides, as a rule, eserine and antitoxin, and they are all, in my experience, of no value. I am not prepared to deny the efficacy of antitoxin. In the case in which I did use it, it was used early—within five hours after the development of symptoms—and yet the patient died within twenty-four hours. I have known cases where the antitoxin was used in the lower animals with excellent results. The only point I wish to emphasize is the point so ably brought out by Dr. Lewis; that is, not to treat any case of injury of the foot slightly.

Dr. Lewis, in closing: I know cases of tetanus have occurred as stated, and have recovered under all sorts of treatment. I only doubt whether they recovered from the treatment. My own observation is that treatment is practically worthless. I only wished to bring before the Society the point I emphasized so strongly. Dr. Dugan brought out a very good suggestion in the use of peroxid of hydrogen. We know that the germ can not live in the presence of oxygen. Of course, I did not mention every thing, and perhaps much I said might have been left unsaid, but I leave it to you.

“Practical Treatment of Typhoid Fever,” by Basil M. Taylor, M. D., Greensboro.

Discussion. Dr. Hunnicutt: I think the essayist has overlooked one of the main points; he has overlooked antiseptics in his treatment. He also states that he would not use heart tonics. He uses as an antipyretic antifebrin, which I think should not be used at all. I do not think antifebrin, or any coal-tar preparation, has any place in the treatment of typhoid fever, and when an individual omits heart tonics in typhoid fever he will sooner or later find out that he is making a great mistake. In our part of the country we have typhoid fever all the time, and I have seen it in all forms, from walking typhoid fever to that severe form which will sweep away the patient, no difference what you do. I do agree with the gentleman, that we should not overfeed these patients, but I think we should take a lesson from nature, for we find nature feeds all her weaker subjects on milk.

Dr. W. B. Gossett: As to constipation, one point I want to bring out. When you first get a case of typhoid fever you do not want to purge, but move the bowels thoroughly with calomel and follow it up with sulphate of magnesia, and from that day on clear through move the bowels once or twice a day. Do not go two or three days and say the patient does not need any thing because there is nothing in the bowel, but move the bowels once or twice or three times daily. All you will need will be the calomel and the saline, such as sulphate of magnesia. As to disinfecting the bowel, we know the bowel is so long a tract that it is hard to get at the glands that are infected; but by keeping the bowels open we find the patient will do a great deal better, and you will not have as great danger of hemorrhage as you would have otherwise. Now, as to the fever. If the fever is 101° to $102\frac{1}{2}^{\circ}$ or 103° , you need do nothing for it. It is natural to have some fever, but after it gets over 103° you want to reduce it. For this purpose do not use any of the coal-tar antipyretics, but use ice, which will lower the temperature and at the same time stimulate the patient. Then as to diet. You don't want to starve the patient, nor do you want to feed at too short intervals, but three or four times a day. I think the best heart stimulant we have is strychnia, one-sixtieth to one-thirtieth grain every three or four hours, and continue the strychnia throughout the disease and in convalescence.

Dr. Gaddy: In the first place, the essayist neglected to speak of the cause of typhoid fever. I believe in order to treat any disease we should first know the cause, and remove the cause, and then let nature, the great physician, heal the patient. You know typhoid fever has long been recognized as a germ disease due to the bacillus typhosus, the bacillus of Eberth, located in the glands of the bowels, Peyer's patches. Constipation, I contend, is one of the prime causes of typhoid fever. Constipation does not necessarily put the germ there, but it holds it in close contact with the mucuous membrane of the bowel. My idea of treatment, then, would consist in the very beginning in giving your patient not necessarily a severe purge, but give him a dose of calomel and podophyllin, and never neglect the podophyllin, which we all recognize as an efficient cholagogue to produce a flow of bile, which is nature's antiseptic. Then I agree with the doctor concerning the daily moving of the bowels. Feed your patient, and never forget the liquid diet, especially milk. Then as how to control the fever, I must disagree with my friend, Dr. Taylor, as to giving any coal-tar

preparation when the heart is weak. I would never give them under any circumstances to a typhoid fever patient, because they depress the heart and increase the liability to death. On the other hand, I would reduce the fever by Brandt's system of bathing. Under this system of bathing Brandt claims to cure 99.5 per cent; that is, there is only one half of one per cent of mortality under the system of bathing as practiced by Brandt. Under the system practiced by Osler and other distinguished American authorities, the mortality is about three fourths of one per cent. Bathe the patient with warm water or with cold water. As to which we will use, we must consult the individual peculiarities of our patient. Some patients want warm water and find cold water irritating, and others prefer cold water.

Dr. Thornton: Some points in the doctor's paper I want to commend, and regarding some points I differ from him. So far as antifebrin is concerned, or acetanilid, which is not the patent medicine, I have used it in typhoid fever considerably. I do not use it after the heart begins to flag. But I have found that nothing will relieve the headache or quiet the patient so well as acetanilid. Then, later on, leave the antipyrin or antifebrin or acetanilid off. I believe the acetanilid has some antiseptic effect upon the intestinal canal. I have treated many cases, and they have not turned out like the cases of cerebro-spinal meningitis that have been reported. Most of my cases got well. In starting with a case of typhoid fever we can not always see the case early, and there I believe is where the mortality is increased in typhoid fever. You will remember that Brandt says that those cases that fail to recover come under treatment after the fifth day. The patients feel a little bad, and think they will feel better the next day, and keep on working for days and days. Finally they die from perforation or from hemorrhage. I would say to use calomel in repeated doses, not as a purgative, but to cleanse the bowel. Then, if you will bear in mind the etiology and pathology of typhoid fever, and will agree that the bacillus of Eberth is the cause, located in Peyer's patches, and these patches are found to be infected, showing first one involved and later more involved, and showing that not all are involved in the same manner, you will see the logic of using antiseptics. With the passages from the bowel the germs are thrown off. If you leave the germs in the bowel, by force of number they will invade fresh tissue, and this is the reason why typhoid fever is continued for six weeks, and two months in some cases. We can not kill the germs *in situ*, for they are

behind the breastworks, but you can make the intestinal tract so unhealthy for them that no new glands will become involved, and thus you will cut the disease short. You will not abort the disease, but you will limit the invasion to the glands already involved, and the patient will be on the highroad to recovery in from ten days to two weeks.

Dr. Bate: We know in the second week the solitary follicles become swollen and enlarged. Then at the end of the second week and beginning of the third week we have two possibilities to take place: Either this enlarged gland becomes soft and we do not have ulceration, or we have the breaking down of the gland and ulceration. Huchard has shown that coma and the formation of gas are dependent upon this auto-infection, and when that is removed we do not have these symptoms. The infection of many of the glands is absorbed without ulceration taking place.

Dr. Taylor, in closing: Now, as to the use of a heart tonic. Under the treatment I have outlined the patient is not poisoned by overstimulation or overfeeding and the reabsorption of waste products in the bowels. I move the bowels twice a day by high enemata, and thereby prevent any absorption of waste products. The kidneys are kept flushed, and if the heart is strong, what need have we of heart-stimulants? Without auto-infection you will not have a temperature over 101° . It is the absorption of waste matter from the bowel that gives the extra three or four degrees of fever, and if you get away from that, what do you need of baths or any thing of that kind? I use warm water. Antiseptics are not needed when you practice asepsis. With care of the stomach and digestion, you have no tympanites. Of course, if you give food every two or three hours, and have the disease continue several weeks, then it is different. But all you need is to let the patient get well.

ANTI-STREPTOCOCCIC SERUM IN SMALLPOX.—Dr. J. M. Lindsay, health officer of the Middlesboro Isolation Hospital, says that in the management of a recent epidemic of smallpox he observed that medical treatment had little or no influence on the disease. It was observed that the date of pustulation marked a period when the patients became much worse. Many of the patients had abscesses, and this accompanying illness resembled chronic pyemia in many respects. Anti-streptococcic serum 10 c.c. for three days, beginning date of pustulation, was administered. The danger of heart-failure was greatly lessened, and the toxemia was not nearly so severe.—*British Medical Journal*.

Foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The Late Sir Edward Frankland; Increase of Lunacy; Royal Visit to the London Hospital; Treatment of Tropical Diseases; Treatment of Abdominal Gunshot Wounds; Pensions for Nurses; Vaccination in India.

The well-known Government analyst of the London water-supply, Sir Edward Frankland, has just died in Norway, a country he visited annually for salmon fishing. His early scientific studies were carried out in this country, but were completed abroad at the universities of Marburg and Giessen. In early life he especially devoted himself to some important investigations in a new field of organic chemistry, being appointed, in 1851, to the chair of chemistry in the then recently founded Owen's College, Manchester, now known as the Victoria University. He subsequently moved to St. Bartholomew's Hospital, London, which he left in 1863 to become Professor of Chemistry at the Royal Institution of Great Britain. Professor Frankland retired from active pursuit of his profession in 1885, having issued his "Experimental Researches in Pure, Applied, and Physical Chemistry" in 1878.

The Commissioners in Lunacy have issued their fifty-third annual report. It appears that on January 1, 1899, there were 105,086 lunatics in England and Wales, an increase of 3,114 on the previous year. The report shows that the increase was the largest annual one on record, and furthermore that the recovery rate was unfavorable, being 36.87 per cent of the total number of admissions, as compared with 38.81 per cent, which was the average rate for the ten years 1889-1898. Two new county asylums had been opened during the past year, making a total of county and borough asylums for England and Wales seventy-six. The total number of admissions in 1898 was 19,314, of whom 9,382 were males and 9,931 were females.

The Princess of Wales recently paid a visit to the London Hospital. Her first visit was to the outpatient receiving-room, where the list of some three hundred cases which had been treated that day was examined. Her Royal Highness entered into conversation with several of the patients who were awaiting treatment. Afterward, while visiting the wards, much interest was taken in the Hebrew one, where arrangement is made for the due observance of the religious customs of the Jews, the ward having the passover cake over the portal, the ten commandments on the door-posts, and is also provided with a special kitchen. In the three other wards visited the Princess spent nearly two hours in conversation with the different patients. The visit was quite a private one.

For the first time in the history of coroner's inquests in London the doctor in the case was a lady who was recently appointed second medical officer to the Bethnal-green Infirmary.

Much interest was shown in the departure from Liverpool for the Grand Canary and the West Coast of Africa of a number of professional men for the purpose of making experiments and acquiring information useful in the treatment of tropical diseases. The party was headed by Major Ross, of the Liverpool School of Tropical Diseases; along with him was Dr. Annett, also of the School of Tropical Diseases, which is connected with the University College and the Royal Southern Hospital. These two gentlemen are sent out by the school to which they belong, and it is the first organized expedition despatched from England. Mr. E. Austen, another member of the party, belongs to the Natural History Department of the British Museum, who is being sent out by the British Museum. Dr. Van Neek, of Belgium, is also with them. Freetown, Sierra Leone, is to be the center of their experiments on the species of mosquito which is supposed to be the principal agent in the propagation of malaria.

Major Beevor, of the Royal Army Medical Corps, in a discussion upon the diagnosis and treatment of gunshot wounds of the abdomen, said he agreed that in all cases abdominal section gave better results than the expectant method, but went on to point out what difficulties were met with in the field. He gave as an example that at the action at Dargai in India the only water available for all surgical purposes was that of a small village pond into which flowed the liquid excreta of men and animals. The dressings had to be manipulated by hands which were dirty, and the number of abdominal cases was so large that only first dressing could be applied. As to the difficulties of supply, Major Beevor said in that action the first five transport mules which reached the top of the ridge were shot dead by some natives, 2,800 yards distant, who were armed with the Lee-Metford rifle. Irrigation was recommended even before the enlargement of the external wound, and if collapse came on during the operation, proceedings should be stopped and irrigation performed.

Few societies with a history which goes back only twelve years can boast such a record as the Royal National Pension Fund for Nurses. Its invested funds now amount to nearly half a million pounds, and it is stated by the Council in their annual report that the nurses have paid into the fund £250,000 since the last reception at Marlborough House four years ago. The income of the fund at the present time is £83,000 a year. The scheme is based upon thrift and self-reliance, and it claims to be the greatest and most successful of insurance and friendly societies for women workers in the world.

The Government of India has formally sanctioned at the public expense voluntary inoculation against enteric fever. Many officers at Aldershot who are under orders for South Africa have already undergone inoculation, and any non-commissioned officers and men can, if they wish, be inoculated free of charge.

Vaccination against smallpox is stated to be making most satisfactory headway throughout the Bombay Presidency, as it appears that during the five years ending in 1897 the percentage of births successfully vaccinated was never lower than fifty-five, and on one occasion it rose to fifty-nine. Unfortunately, in the Bengal Presidency the percentage is as low as eighteen, and the average number annually vaccinated by each officer is 650, while in Bombay each operator had an average of 1,690 cases.

Dr. Lambert Lack will in the autumn publish the results of his careful investigations into the cause of cancer. His researches have been on entirely original lines, and the results have been examined by a select committee of the Pathological Society. He proves the theory that cancer is due to injury to the basement membrane of mucous and allied structures. Dr. Lack states that by causing injury to these structures he has produced cancer in some of the lower animals.

One small company who some time ago started a sanitarium for tuberculous patients in England at the present moment pays ten per cent to its shareholders, with every likelihood of increased profits.

LONDON, August, 1899.

Abstracts and Selections.

ILLINOIS SOCIETY FOR PREVENTION OF CONSUMPTION.—One week ago there was organized in this city a society having for its object, as its name indicates, the prevention of tuberculosis. Relative to this topic and apropos of it is what the Journal of the American Medical Association has advocated for several years, viz., that the United States Government should have a department of public health and a competent scientific physician as medical secretary of the same. In this respect the Government is behind the times.

At the Columbus meeting of the Association Dr. Joseph M. Mathews, in his presidential address, among other things stated, "That it was incumbent upon the Association as far as scientific investigation can do so, to eliminate tuberculosis from the land, a disease so dreaded in character that it actually does remove yearly one seventh of the population of the universe."

I have often thought that statistics are sometimes imaginary, and not as reliable as we would desire, but Dr. Mathews' statement in this respect is acknowledged by the scientific world to be approximately correct, so much so that the international conference which was held in Berlin last month to consider this topic arrived at the same conclusion, as have other analogous scientific organizations, etc.; the result of this latter congress, as we are all aware, is that much good has already been effected.

We, as scientists, veterinarians, public officials, lawyers, merchants, dairymen, and others, who were represented at the meeting organized one week ago for this cause, should unite and co-operate in stamping out this dread malady.

The old maxim, "prevention is better than cure," certainly applies with equal force and greater efficiency to tuberculosis. I quote again from Dr. Mathews' address, "That a committee be appointed from the American Medical Association to prepare a careful report on this subject and submit the same to the next session of Congress."

The attention of Congress has been called to this appalling fact year after year for several years by the physicians throughout the United States, and particularly by the special committee of the Association, which was appointed in 1892, whose bill was endorsed by many scientific bodies of our country, advocating the idea of a department of public health for this nation, having a proper, able, and scientific medical secretary at its head to rank in dignity with other cabinet officials; had this been done years ago, the United States Government, through its department of public health, would have accomplished incalculable benefit in educating the people in preventing the disease, and thus would have been the means, possibly, of saving thousands of precious lives.

All Europe at the present time is on the alert regarding the great importance of preventing consumption. Throughout England various scientific associations have awakened to the great importance this subject deserves. We should not only devise the best methods of prevention, but our Government, State, and municipal authorities should adopt measures for the care of this class of its citizens. That pulmonary tuberculosis is contagious under certain conditions is a well-known fact. Hence it is necessary to adopt measures to prevent its communicability to the healthy classes.

As to management and treatment, when tubercle bacilli are discovered in the sputum of a patient, a change of climate, all other things being equal, is perhaps the first *sine qua non* thought of. To eradicate or kill the germs is what is most desired. In pursuance of this, we must be careful not to hasten a patient's death by isolation and other methods. I am a profound believer that fully twenty per cent of the cases of pulmonary tuberculosis are amenable to treatment that will result in recovery under suitable climatic conditions and the best hygienic environments. This is aside from any form of scientific treatment with drugs, though thorough and scientific in every detail, that might aid in increasing the percentage of recoveries.

I am a believer, also, contrary to what we are taught nowadays, that pulmonary tuberculosis is, or should be, classed as a hereditary disease—not that I desire to be understood that every case is one of heredity, and even though a hereditary taint be present in a family, that recovery should not be anticipated. Physical influence, and an optimistic view, as much as is consistent, should enter into the cure, probably of every class of patients. My desire in the near future is to see a national department of public health, where, in the nation's laboratory, not only tuberculosis but all other constitutional diseases that are preventable can be studied and investigated; indeed, where every thing all along the line can be scientifically studied

and statistics established irrefutably tending to "build up" the health, and thereby promote the longevity of future generations and our citizens.—*Liston H. Montgomery, M. D., in the Journal American Medical Association.*

MEAT EXTRACTS OF VILE ORIGIN.—The Lancet of April 22d comments upon revelations which have recently been made concerning the preparation of meat extracts from filthy material, such as putrid livers and offal. Modern chemistry has unwittingly placed at the disposal of those who prepare meat extracts in this manner deodorizers and subtle flavoring materials which disguise the substances from which these extracts are made. The Lancet considers that a system of control should be established by the State, so that extracts might from time to time be subjected to chemical and bacteriological examination. Possibly many cases of gastro-enteric disturbances, the etiology of which has not been discoverable, may have been due to the ptomaines generated in such preparations.

THE SERUM TREATMENT OF PULMONARY TUBERCULOSIS.—G. Zanoni in a recent monograph (*Essais de Serumtherapie Antituberculeuse—méthode Maragliano—fait à la Clinique Médicale de l'Université de Genève: Geneva 1898*) gives full details of a series of twenty-seven cases of pulmonary tuberculosis treated in Revilliod's clinic at Geneva with Maragliano's "anti-tuberculous" serum. Among these cases three were in the infiltration stage, ten in the softening, and fourteen in the cavitation stage. In all the cases bacilli were present. The duration of treatment varied from a few weeks to a year and more. Of the cases in the first stage, two were cured, and one remained stationary. Of those in the second stage, one was on the way to recovery, six were improved, two remained stationary, and one had got worse. Of those in the third stage, two were on the way to recovery, four were improved, two remained stationary, and six died. Of the total number (27) treated, therefore, there were three "on the way to recovery," twelve improved, five *in statu quo*, and seven worse; giving a proportion of eleven per cent recovering, forty-four per cent improved, nineteen per cent stationary, while twenty-two per cent got worse or died. Maragliano's own statistics show in a total of four hundred and twelve cases sixteen per cent cured, forty-eight per cent improved, twenty-five per cent stationary, and eight per cent in which the patient got worse. Zanoni states that in forty-seven per cent of his cases weight increased, in some as much as five or six kilos. Fever disappeared in fifty-two per cent. Physical signs almost disappeared in twenty-two per cent, diminished in thirty per cent, remained stationary or got worse in twenty-four per cent. Bacilli disappeared in twenty-four per cent, diminished in number in forty-one per cent, remained stationary in thirty-two per cent. Night sweats in all cases in which distinct improvement was noted. Zanoni attributes the good results solely to the serum; no other special treatment was employed, and the food was the same as that given to other patients.—*British Medical Journal.*

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"*NEC TENUI PENNĀ.*"

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PUBLIC NUISANCES, BAD SEWERAGE, AND DEFECTIVE PLUMBING.

Defective plumbing and bad sewerage are two common enemies of all large cities, and Louisville is no exception to the rule. Within the eastern limits of the city is a filthy, sluggish stream into which all kinds of sewage is constantly pouring. The emanations from this cesspool are a menace to the health of all who live adjacent to it, and it is undoubtedly the cause of much sickness. It would cost only a small amount to grade this stream so as to allow this filth to find its way directly into the river without delay. It is the accumulation of the filth in the low places and sluggish parts of this stream that makes it so obnoxious. As to the plumbing in dwellings, there is but little of it that is first class, from a sanitary point of view. There are many reasons why this is so.

Much of the present work is old, and the owners are antiquated and will not make changes unless they are forced to do so, hence the condition of property in such hands. Secondly, there is no law by which the constructor of property can be guaranteed that the plumbing that he contracts for is what he needs, or that he will get what he contracts for, because he must depend on an architect and a plumber, and it often happens that neither is particular about any part of the contract, save to draw the amount of money agreed upon for the work to be done.

What Louisville needs is an inspector of plumbing, whose office shall be combined with that of building inspector, with a salary of five thousand dollars per annum. This would insure all of the work to be properly done. The plans for every building could then be submitted and all defects cured in the beginning, and when the work was completed the inspector could examine and receive or reject as the case may be. This would put an end to all defective work, and this most important part of house construction would be properly executed.

DRUGS AND SUICIDES, CARBOLIC ACID AND MORPHIA.

The promiscuous sale of carbolic acid should be prohibited. Its use as a medicinal agent should always be directed by a competent physician. It has become popular as a domestic disinfectant, and in that way is regarded as a common article of commerce.

It has also become one of the fashionable agents to commit suicide with, and for that reason alone its promiscuous sale should be prohibited. The great majority of people who attempt suicide, if rescued, never make a second attempt. This is especially so with women. If they take carbolic acid there is but little hope of saving their lives, while if morphine or arsenic is used there is a fair chance of preventing death.

There is no reason why the sale of carbolic acid should not be restricted to the doctor's order. It is of no special therapeutic value, and as a disinfectant permanganate of potash is far its superior and harmless in every particular.

MORPHIA.

The unrestricted sale of morphia is one of the greatest curses of our modern civilization. There are to-day hundreds and thousands of our best men and women in all grades of society who are its slaves. Who was to blame for the acquirement of the habit by these people is a question almost as grave as the one under discussion. Many people become morphine-eaters as the result of a careless or indulgent physician. There is entirely too much morphia given by the doctors. The

ever-ready hypodermic syringe is used too often, and it is by this means that many persons become addicted to the use of morphia.

As to the promiscuous sale of morphia, there is no excuse. As a remedial agent it should always be given by a physician's order. That of itself would, to a great extent, put an end to its unnecessary use.

Suicidal doses should not be sold to any person under any circumstances.

While there is a law which is supposed to regulate the sale of morphia in this State, there is little or no attention paid to it; and if the law was followed out to the letter it would not lessen the sale of the drug, as the morphine fiend will lie and steal if necessary in order to obtain the drug.

The law requires that the purchaser of morphia shall register his or her name and address. This does not deter the confirmed morphine-eater in the least; in fact, it only enables him to procure it more readily. The law should be so changed as to make it impossible to secure it without the order of a physician, and this order should not exceed over three grains for every twenty-four hours.

TUBERCULOUS COWS.

The following letter has been received from Dr. J. N. McCormack, Secretary of the State Board of Health:

BOWLING GREEN, KY., Sept. 10, 1899.

Dear Doctor: Our law in regard to tuberculous cattle is so indefinite that it has little if any value, especially as we are without funds for its attempted enforcement. It could only be reached under the general law as to infectious diseases in domestic animals. Most of the work done in the State has been under city ordinances.

Sincerely,

J. N. MCCORMACK, *Secretary.*

In the issue of August 15, 1899, of the *American Practitioner and News* there appeared an editorial on the subject of tuberculous cattle.

It seems that most of the work of the State Board has been done under city ordinances. It is to be hoped that the next legislature will take up this very important subject and enact such laws as will give the State Board of Health power to control all tuberculous cattle. This would be a long stride in the proper direction, and would do much to lessen the mortality of human life.

Notes and Queries.

HUMAN FACE AND JAWS.—Man is a compound organism made up of many different organs, structures, and systems which have their own life, albeit subordinate to the life of the organism as a whole. These structures, organs, etc., draw on a fixed supply of the nutriment, and unless this nutriment be properly distributed through the system of checks summed up in the nervous system one organ of structure will receive more than its due proportion of nutriment. The balance kept up by the checks is distributed when the organism becomes nervously exhausted, either from nerve-tire, from general disease, or from other cause. If this exhaustion occurs at certain periods, called the periods of stress, or of involution and evolution, certain structures on which is thrown such stress are peculiarly apt to be affected either in the direction of arrested development or of hypertrophy. Prominent among the structures which mark these periods are the jaws and teeth, considered together.

The period of the first dentition is one of these periods of stress during evolution; the period of the second dentition is another, and the appearance of the so-called wisdom-tooth marks a third, while the disappearance of the teeth from senility is the period of involution. These conditions of nerve-strain may affect the organism of the individual so that not he but his descendants show the effects. To this result are often due the irregularities of the jaws and teeth resulting from the lack of balance of the proper distribution of nutriment. The defective palates are also an expression of this strain and not of conditions like mouth-breathing, due, like the defective palates, to hereditary defect evincing itself during the evolutionary periods of stress or at birth. These irregularities are danger-signals prophesying what may happen to the child of the nervously exhausted individual unless there be proper training at the periods of stress, training which will involve brain, nervous system, nutrition, and excretion.

The degeneracy which results from nervous exhaustion is a prophecy of what may be, rather than a destiny. As the dentist is among the earliest of the medical specialists to whom application is made, it comes within his power to outline a course of training and treatment which will prevent the child evincing irregularities from becoming a moral lunatic, an imbecile, a paranoiac, a sexual lunatic, or a victim of lesser forms of degeneracy. Here is a point at which the dentist is afforded an excellent opportunity to take part in the beneficent work of the prophylaxis of the medical profession, which has done so much for the race. The three dentitions, as they are called appropriately by Dr. Talbot, mark three periods of systemic evolution when it is possible to affect the mental and physical development favorably. —*J. G. Kiernan, in the Journal of the American Medical Association.*

Special Notices.

THE preparations of "Pepsin" made by Robinson-Pettet Co. are endorsed by many prominent physicians. We recommend a careful perusal of the advertisement of this well-known manufacturing house in this issue.

SANMETTO AND IMITATIONS.—I gave Sanmetto a trial in a case of gonorrheal cystitis where all the usual remedies and Sanmetto imitations had failed, and it gave the desired result. Will continue to use it.

L. H. SARCHETT, M. D.

Hudson, Ia.

THE INFLAMMATORY CONDITION IN PERITONITIS, ETC.—An interesting reference to an extensively prescribed remedy is found in that valuable text-book, "Materia Medica and Therapeutics," by Finley Ellingwood, A. M., M. D., Chicago. The substance of the article is to the effect that the influence as a pain reliever of the popular analgesic—antikamnia—is certainly next to morphine, and no untoward results have obtained from its use, even when given in repeated doses of ten grains (two five-grain tablets). It is especially valuable during the progress of inflammation, and given in pleuritis or peritonitis it certainly abates the inflammatory condition, relieves the pain at once, and the diffused soreness shortly as satisfactorily as opium. It does not derange the stomach or lock up the secretions. It is also of value in pain of a non-inflammatory character, and is a convenient and satisfactory remedy in headaches without regard to cause, if the cerebral circulation be full.

SUMMER DIARRHEA IN INFANTS.—Abroad of late years a good deal has been said of the value of tannigen in controlling the stools. Dr. Blackader, of Montreal, in the March number of "Progressive Medicine," in an excellent review of the recent literature on summer diarrheas, quotes no less an authority than Escherich, the well-known Professor of Children's Diseases at the University of Graz in Austria, who speaks very favorably of tannigen, and claims for it a distinct disinfectant and bactericidal effect. Kraus and Biedert have also written in its praise, especially for chronic intestinal catarrh. It is a tasteless powder, therefore easily administered, and is given in doses of two to five grains four times a day. It is especially useful in cases of follicular enteritis, where local measures are of little avail. Its administration is continued in lessened doses after the acute symptoms have subsided, and it is said to hasten convalescence, which is often apt to be tedious.—*From an editorial in the Medical News, July 15, 1899.*

A SUBSTITUTE FOR SUGAR IN DIABETES.—Notwithstanding the large number of remedies brought forward from time to time for the cure of diabetes, the dietetic treatment still continues to occupy the most important part in the management of this disease. In view of the fact that in severe cases the use of starches and sugars is absolutely interdicted, much ingenuity has been exercised in devising substances which would replace these foods. While the attempts to produce substitutes for starchy foods have not been very successful, much has been accomplished in the discovery of artificial sweetening agents which enable the patient to gratify his craving for sugar without producing the harmful effects of the latter. Among the sugar substitutes Sycose represents the latest stage in the evolution of a perfect product of this kind. It has a sweetening power 550 times greater than that of cane sugar. Owing to its chemical purity, its freedom from the inert matter found in other substitutes for sugar, its pure taste and solubility, it is eminently adapted for medicinal use. Sycose is therefore well worthy of a careful trial in the treatment of diabetes and of all other diseases in which the use of ordinary sugar in any form is contra-indicated.

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"NEC TENUI PENNÂ."

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

EPIDEMIC CEREBRO-SPINAL MENINGITIS.*

BY WM. BAILEY, A. M., M. D.

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Cerebro-spinal meningitis is brought before you to-night because of its importance, due to its widespread prevalence and its high rate of mortality. No disease is more to be dreaded, for none shows less tendency to be controlled by any therapeutic measures hitherto adopted. The name cerebro-spinal meningitis is better applied to it than spotted fever or others that have been used during its history, for it better defines the disease and carries with it ideas of its essential pathological phenomena.

Spotted fever is not well suited, for many of the cases show no lesion of the skin. It has no doubt existed for many centuries, but not until 1805 was it clearly recognized as a separate and distinct disease. The clinical history was clearly written at that time, but of course a correct history as to the etiology and pathology of the disease was not possible in that age. The next year, 1806, it was recognized in Medfield, Mass., and was described by Danielson and Mann.

This work was probably done without having access to or knowledge of the epidemic at Geneva. It soon extended to other parts of the State of Massachusetts, and gradually to many parts of New England. Of course the wide-awake, intelligent New England doctor came at once to the front, and many papers appeared describing the disease as

*Read before the Louisville Medico-Chirurgical Society, June 30, 1899. For discussion see page 216.

best it could be done at that period. Massachusetts has always stood in the forefront in all work looking toward the education and betterment of the people, and to-day she enjoys an enviable and well-earned reputation in all science and literature, and especially in medicine and sanitation.

The State Medical Society of Massachusetts at once appointed a special committee to study this disease and present to the world a report that was and always will be a credit to those engaged in it. Since that time we have had it with us more or less continuously in various parts of our broad land. Massachusetts again presents us a notable report in the study of this disease.

The State Board of Health, through Drs. Councilman, Mallory, and Wright, published to the world in 1898 the best picture of the disease extant. Such a book was not a possibility until this last decade of the century. The board was extremely fortunate in securing men so well fitted for the work to be done, both by virtue of the necessary scientific knowledge and the skill in technique essential in order to make the first available.

Etiology. In my opinion the best authorities recognize as the specific cause of epidemic cerebro-spinal meningitis the diplococcus intracellularis described by Weichselbaum in 1887 and named by him "diplococcus intracellularis meningitidis." Many observers began to find bacteria in connection with the pathological processes going on in the membranes of the brain and spinal cord.

Full confirmation was probably not afforded until about three or four years ago. Many competent observers no doubt failed in confirmation, as they often fail in making diagnosis at this day, because of the necessity of timely observation and for certain precautions in the culture of the germ.

Microscopically the germ is most certainly found in the early days of the disease, and hence in cases dead from the chronic form the observation may prove negative. The growth in culture is likewise difficult, for the medium of culture must be suitable, and then the application must be generous else the observation will prove negative. The introduction of the practice of spinal puncture has removed many of the difficulties, and the demonstration by one competent must be regarded as comparatively easy at the present time.

Other germs are no doubt able to produce inflammation of the meninges of the brain and spinal cord, but the contention is that

so-called epidemic cerebro-spinal meningitis is due to the diplococcus of Weichselbaum, designated by him, as already stated, as the "diplococcus intracellularis meningitidis." We find meningitis occurring in the course of pneumonia, and then no doubt it is due to the pneumococcus, for this organism is found in connection with the processes observed in the brain. The pathological condition in this form of the disease is in many respects similar to but not identical with those observed in the epidemic form. Some observers have concluded that the pneumococcus is the essential cause of all other forms as well as those with pneumonia. Against this view we may state that the epidemic form of the disease does not conform to pneumonia as to age, etc. This disease rarely exists after the person is thirty-five years of age, and we all know how common and how fatal pneumonia is in the old.

I have been able to say this much in this way in regard to the causation of the disease. I believe it is due to the specific germ discovered in 1887 by Weichselbaum, and more recently confirmed by others, and that it is present in all cases of epidemic cerebro-spinal meningitis.

I want to ask attention to this point: That the term epidemic here ceases to be absolutely applicable, and the authorities are inclined to describe by the name epidemic the disease due to this germ, this form of meningitis, although it may not be occurring for years in the epidemic form. But it is the form that sometimes occurs in limited epidemics, and for that matter occurring sporadically, if this special specific germ is noted it is characterized as epidemic cerebro-spinal meningitis, although there may be but one case in the State. Ordinarily an epidemic is a thing that is upon the people; the prevalence of it makes it epidemic; it is the extent of it; a single case of any disease is not properly an epidemic, because the very name, the meaning of the word, is upon the people; the disease must be prevailing and extending from day to day. A single case, under the strict construction of the meaning of the word, can not be an epidemic; but we would have you understand that the authorities, in speaking of it as epidemic cerebro-spinal meningitis, may mean only one case, provided it has for its cause the specific germ spoken of, even though the disease may not be prevailing in epidemic form, and other forms of cerebro-spinal meningitis that occur not due to this germ have not the same pathological conditions nor are they exactly identical, although as the

inflammation involves the same parts, of course the symptoms and much of the phenomena must be the same.

Having spoken briefly in regard to the causation of the disease, I would like to consider as briefly as I may next the pathology of the disease, the extension of it from the seat of the disease, some of its complications, and also the symptomatology.

As to how the germ is introduced to the meninges is not well understood or positively determined. It may be and most probably is introduced from the nasal passages by absorbents carried not directly as you would carry infection from the nasal passages into the bronchial mucous membrane, but being absorbed and carried there, setting up an inflammation. Then the inflammation is of great importance, because of the importance physiologically of the parts involved, the impairment of function that comes from the inflammation. Then another thing that makes this a more serious matter is that the products of inflammation are retained in the cavity of the skull and in the spinal column. Consequently we have the same difficulties here that we have, for instance, in the pericardium; it is not always the inflammation of the pericardium which gives us the greatest trouble, but it is the retention of the products of the inflammation in the pericardium of itself handicapping or proving a very serious inconvenience to the heart's action. It is the same thing in pleurisy and other diseases where the products of inflammation are retained in closed cavities; it is particularly true in the brain, because the products of inflammation are retained, involving a part concerned in the vital functions of the economy. Again, by pressure there is no doubt that the function of the part is seriously interfered with, and this fact constitutes perhaps a part of the phenomena in the symptomatology of the disease, pressure being the cause of many of the symptoms.

The effect of this inflammation noted upon the blood is an increased or pronounced leucocytosis, a very greatly increased number of white blood-cells, and characterized by an exudation which is somewhat fibrinous, but not as markedly so as when produced by the germs that ordinarily produce pneumonia, and so that form of meningitis that comes in connection with pneumonia has an exudation which is more fibrinous than this. The exudation occurring in cerebro-spinal meningitis is not always very extensive; the fulminating cases that die in twenty-four to forty-eight hours do not always show much exudation, but the explanation of that is possibly the nature of the structure

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involved, as the disease is not limited, while the products of inflammation seem to be largely confined to the membranes of the brain, to the pia and arachnoid; yet the disease does go deeply into the tissue and follows the course of the vessels that go out from the brain as well as the brain tissue itself, consequently these cases die before the exudation is very pronounced. After twenty-four hours, or a short time, then, there is scarcely any macroscopic change, yet the microscope shows degenerations of the tissue, and it is the importance of the function of the part that is in the lesion which makes it so grave a disease. The degenerations are very marked and take place very promptly.

The complications occur in the same way, possibly from the brain by means of the nerve, possibly by degeneration, or perhaps by the germ extending in some way in connection with the sheath of the nerve, the blood vessels or lymphatics. The same process occurs out in the course of the nerves, particularly to the eye and to the ear, and constitute complications that are very frequent, and to the organs very disastrous; and hence it is a question often whether it is well for a person to recover from this disease, being left in the condition in which they oftentimes are; that is, the functions of sight and hearing having been destroyed, it is questionable whether it would not have been merciful had they died. These complications occur very frequently. A purulent inflammation of the eye will develop in twenty-four or forty-eight hours almost to destruction of the eye. In the same way it will extend to the internal ear, if not to the middle ear, and destroy the hearing. And these cases are much more apt to occur by these degenerations extending by means of the nerves to these parts in the epidemic form than in the forms that are due to the pneumonia bacillus, or to the tubercle bacillus, or any other known cause of meningitis; consequently these complications are much more apt to occur in this so-called epidemic form. An inflammation beginning in the ear is sometimes a source of involvement of the meninges, but this generally becomes secondarily involved from the epidemic form of meningitis, and it is only an extension by means of the nerves from the part that causes the degeneration; in other words, it does not become an infectious body disease, and other organs undergoing degeneration like that which occurs in some other diseases we might mention. We are not likely to have an involvement of the liver, kidneys, etc., due to the circulation of the germ in the body, or from toxins. It is a disease remarkable in that the effect is largely con-

fined to the meninges of the cerebrum and to the spinal cord, and degeneration of the nerves that go out from the brain and the spinal cord.

One word more in regard to the contagion: I am unwilling to record myself as stating positively that a disease is not contagious when it is conceded that the disease is due to a specific germ. I believe I am safe in saying that in any disease that is due to a specific germ, there is indirectly or directly, whether we appreciate it or not, a relation between two cases in some way. That is, it depends in one case upon the germ having come from a previous one, whether we understand all the phases of life of the germ between the two cases or not; and I would argue that the disease is not markedly contagious because its vitality does not seem to be great. As stated in one place, great care must be observed in order to get a culture; the medium must be of a certain kind, and the application of the material containing the germs must be very carefully carried out, else you may fail to get a culture. The most we can say is that it is not a very contagious disease; and then the fact that it is so difficult, as we understand it, for the germs within the cavity of the skull, or of the spinal column, in the cavity of the meninges, to make their exit; hence, as was laughed at in the State Society, my argument that it was a safety because it was less contagious by virtue of this, and in my judgment if there was an open communication between the meninges or seat of the disease and the external world, we would have a much more contagious disease than we now have, but fortunately the germs can not readily escape. They are sometimes, however, found in the mucous membranes or in the discharges and secretions of the nose and some other parts of the body, not very generally, but they may be introduced in this way.

A pachymeningitis is sometimes found in connection with disease of the middle ear and disease of the brain; the streptococcus may be found, and then these local conditions of the ear may be secondary to the brain lesion, or they may have existed first and the infection transferred from them to the brain. But the other forms of meningitis are not characterized by nerve degeneration and by the transmission of the disease from the brain to other parts in the same way as this epidemic form seems to be.

Next, as to the symptomatology: Ordinarily without prodromata the introduction of the disease is positive. It is sudden, and for the

most part we may say it is unmistakable. All marked cases are as a rule readily recognized; the disease has a sudden onset; there is intense pain, accompanied by pronounced vomiting; pain is referable to the head, particularly the back part of it, and to the neck and spine; but it may give you hyperesthesia, it may give you pain in various parts of the body; but it is so pronounced and there is such prompt vomiting; in children convulsions, or even in the adult, and this stage passes into delirium and possibly soon into coma. From the very importance of the structures involved we can see how the symptoms must be very pronounced. I do not think we are very apt to mistake a case of the epidemic form for any thing else. There are some other diseases we might mistake for this possibly, but you are not apt to be misled if you have a well-developed case. In the more chronic form there are intervals and remissions of the disease. I have seen cases where they were apparently absolutely relieved, headache gone, fever gone, pulse normal, but in a little while a recurrence takes place, and it is said that it may be observed sometimes that the germ is absent or the observation is negative during that intermission, and is present during the time of the exacerbation. I have no doubt that we have an exacerbation of the disease in many cases, perhaps a new invasion, new surfaces of the membranes becoming involved, an increase of the fever, headache, etc., and extension of the disease, just as we have an increase in the fever by the extension of pneumonia to new parts of the lung.

The prognosis in the epidemic form of the disease is very unfavorable. In the study of the disease as made by Councilman, of Boston, last year, of one hundred and eleven cases observed there were seventy-five deaths, making a mortality of sixty-eight or seventy per cent. This is a fatal form of the disease, and I think the statistics of Councilman are about in accord with the results of the disease in Henderson County, Kentucky, this year. I believe fully seventy per cent of the cases died, many of them dying very promptly. So the prognosis, we may say, in all cases of the epidemic form is very unfavorable.

Treatment. The treatment has not been satisfactory. As already stated to you, it does not seem to make any difference whether you treat the case or not. A small per cent of the cases will recover whether you treat them or not, or whatever may be the method or the manner in which you treat them. We do not seem to be able to control them by any measures at our command, by mercurials, by iodide of potassium, by blisters, by purgatives, or what not; we do not

seem to be able to control the process, particularly in this so-called fulminant form, those severe acute cases where the patient passes away within a few hours from the inception of the attack. During this time, in this form of the disease, at least, we are simply forced to stand aside; we are not in it, so to speak; there seems to be nothing we can do which will afford relief. But I would like to express the hope that we must come to something for the consideration of this disease, and by analogy in other diseases I want to express the hope that eventually something will be accomplished. I believe good has already been accomplished by spinal puncture. This is certainly the way to make a correct diagnosis in doubtful cases. It may be done, as I am satisfied, without very much trouble, and fluid from the spinal column may be obtained in sufficient quantity to make a microscopic examination and to make a culture, and I believe likewise that it will be of service in the disease to draw off the spinal fluid, which no doubt is increased and gives bad effects by its presence and pressure; that it is of service to the patient to withdraw that fluid; hence I think aspiration is proper, and that the puncture is of good to the patient, besides making the diagnosis in doubtful cases. I believe, moreover, that we will be aided by the bacteriologists when we come to the question of treating this disease by means of serum-therapy; but we have not yet come to that, though many other diseases that are more easily reached than this have been successfully combated in this manner. But in a general optimistic way I hope, as indicated in a paper I read this week, that a product which will affect either the germ itself, or that an antitoxin to the toxin produced by the germ, will be discovered, and that the disease may be fought in this way. One objection to curing the disease by means of an antitoxin is that it does not seem to be a disease that is affected so much by toxin as is diphtheria, for instance. It does not seem that toxin is an important factor; it is an inflammation and the products of the inflammation, or a degeneration in essential living structures of the brain and spinal cord, the membrane being the principal place for the manifestation of the disease, but it extends into the structure itself of the brain, and then to other parts through the nerves. I think the time will come, however, when we will be able to hold out some hope to patients suffering with this disease, and there is a question whether the surgeon will ever have a hand in its treatment, whether or not these cavities can not be emptied and treated as you would a pleurisy with effusion. I believe it is

proper, if possible, to take care of the excess of fluid and remove it if by its presence it is giving pressure. I think good will come if the surgeon can succeed by his lumbar puncture in withdrawing the fluid as fully and as often as may be necessary. Certainly I think we have reason to hope for something in this direction, and I think lumbar puncture marks a decided advance in the treatment of this disease.

LOUISVILLE.

FOREIGN BODIES IN THE APPENDIX.*

BY W. O. ROBERTS, M. D.

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Foreign bodies until recent years were thought to be the chief factors in the causation of appendicitis. Now they are known to be present in a very small per cent of operative cases; in fact, the percentage is so small that many prominent surgeons, who have had very large experience in appendiceal surgery, have never met with a true foreign body.

While on a visit East this spring I took occasion to interview a number of surgeons as to their personal experience with foreign bodies in the appendix, with the following result:

Dr. W. W. Keene, of Philadelphia, no case.

Dr. Noble, of Philadelphia, no case.

Dr. W. T. Bull, of New York, no case.

Dr. Weiss, of New York, no case.

Dr. John A. Wyeth, of New York, no case.

Dr. McCosh, of New York, one case, a pin.

Dr. Hartley, four cases; two pins, one birdshot, and one orange or lemon seed.

Dr. Robert T. Morris, of New York, one case, a piece of apple-pip.

Dr. McBurney: "Much less than one per cent."

Dr. Nicholas Senn, of Chicago, one case, a pin.

Dr. Murphy, of Chicago: "Not one half of one per cent."

Dr. John Deaver, of Philadelphia, three cases, one pin and two shot.

Dr. P. Dandridge, of Cincinnati, one case, a piece of wire.

Of two hundred and fifty cases of appendicitis operated on during the last ten years at Johns Hopkins Hospital, a foreign body, a section of tapeworm, was found in only one. (James F. Mitchell, *Johns Hopkins Bulletin*, January, 1899).

* Read at the meeting of the Kentucky State Medical Society, May, 1899.

According to Mattersock and Fowler, foreign bodies are found in only about four per cent of operative cases.

Renvers collected from the literature four hundred and fifty-nine autopsies on cases of appendicitis, in sixteen of which there were foreign bodies.

Fitz, in his series of one hundred and fifty-two cases, found them in twelve per cent.

Dr. James F. Mitchell collected fourteen hundred cases from various sources in the last ten years, with seven per cent of true foreign bodies.

Comparing the individual experience of the gentlemen referred to as having been interviewed by me with these statistics, one is inclined to believe that most likely some of the so-called foreign bodies included in these tables were really fecal concretions. Owing to the striking resemblance of fecal concretions to different forms of seed, they might very readily be mistaken for them. Sometimes it requires a careful chemical examination to distinguish between fecal concretions and gall-stones.

Mitchell calls attention to an interesting case of Dr. W. L. Rogers, of Memphis, bearing on this point. His patient, a man twenty-two years old, had had an attack of hepatic colic, with intense pain in the region of the gall-bladder, jaundice, fever, etc. A few days after this trouble subsided symptoms of appendicitis set up, and when the acuteness of the attack had disappeared, three small nodulés could be felt at the side of the appendix. The appendix was removed, and, upon examination, was found to contain three bodies, looking exactly like gall-stones; and such they were thought to be until examined chemically by Dr. Brown, who found that they contained no cholesterin, no bile nor salts, but were composed mostly of organic matter, with carbonates and sulphates of calcium and magnesium.

Foreign bodies have frequently been met with in autopsies made upon persons who had died of other diseases, and who had no symptoms of appendicitis during life, and the appendix containing the foreign body showing no evidence of disease.

J. F. Mitchell, in his paper referred to, quotes from Heveries *Memoirs de l'Academie Royal de Chirurgie*, 1743, the following: "One notices sometimes in opening the bodies of persons who during life have eaten a great deal of game, there is collected in the intestines, and especially in the cecal appendix, a great quantity of shot, without these persons having had the least inconvenience."

Holmes (New England Quarterly Journal of Medicine and Surgery, 1892) reports a case in which there was found in the appendix of a man, dead of pneumothorax, one hundred and twenty-two robin shot. The man had no symptoms referable to the appendix during life.

Warren Coleman, of New York (Press and Circular, August 21, 1895), in an autopsy found a bone five-eighths inch in length and one-fourth inch in circumference which had extended, blunt end foremost, up to the extreme end of the appendix, completely filling its cavity. The bone was entirely surrounded by mucus, and there was no sign of inflammation within or without the appendix.

Foreign bodies have also been met with in the appendix when the abdomen had been opened for other causes, and the appendix in a healthy condition. Dr. McBurney found two grape seed in a healthy appendix of a woman on whom he was operating for the removal of an abdominal tumor.

Such evidence goes to show that the appendix will tolerate the presence of a foreign body without symptoms so long as it does not produce injury to its structure from which infective processes may take place.

When a foreign body once gets well into the cavity of the appendix it is very apt to remain there, owing to the weak expulsive force of the appendix; and while it may not give rise to trouble immediately, it is almost certain to act as a nucleus for a concretion, which will in time cause some form of trauma. Consequently it is always wise, when one is found accidentally, to remove the appendix.

Seeds of various kinds, which were formerly thought to be so frequently met with, are now known to be very rare, fecal concretions having been mistaken for them. The form of foreign bodies most frequently met with are heavy bodies, such as shot and sharp-pointed bodies, as lumbricoid worms, bones, and pins.

Mitchell collected from the literature thirty-five cases in which pins were found. In two of these cases the appendix was found in a hernia sac, one being the case reported by me to the State Society in 1896, and the other a case operated on by McBurney in 1888: "Boy, ten years old, had had for some time what appeared to be an inflamed irreducible right inguinal hernia, the contents of which were thought to be omentum. At the operation the contents were found to be a much-inflamed and thickened bulbous appendix, the enlarged distal end being one-half inch in diameter. In this mass, the points piercing one side

and the heads the other, were two black pins, which lay close together." As Dr. Mitchell says, "one would naturally suppose such a foreign body as a pin in the appendix would lead to rapid perforation; but while this is generally the case, it is not always so. All types of appendicitis may result. Some give rise to only mild symptoms, and may lead to chronic appendicitis, with recurrent attacks" (such was the case in seven of the cases he collected), "or with long-continued pain, or only a feeling of uneasiness in the right iliac fossa, which may last for months or years (two cases). Most often, however, there is rapid perforation, an abscess formation following the first appearance of symptoms. Pin generally lies straight in the lumen, long axis parallel to that of appendix, and perforating with its point. In two instances it was crosswise and perforated one wall of the appendix with its point and the other with its head. In the majority of instances where pins were found the patients were males, and in no instance did the patient remember having swallowed a pin."

LOUISVILLE.

OVERPRESSURE IN SCHOOL WORK: SOME PHYSICAL EXPRESSIONS OF SCHOOL STRAIN.

BY WILLIAM B. MEANY, M. D.

The golden mean of school work still remains an unrealized though not unpractical possibility, and it is not even clear that we shall soon see the end of complaints, discussions, and reforms relating to this subject. The precise co-efficient of study which agrees with fair bodily health is indeed an uncertain quantity, regulated by diverse personal peculiarities. Its fixation must be ordered in each case by a special rule.

In arranging a system of education, however, it is both possible and needful to allot to the average intelligence an average amount of mental effort, which will duly provide for the requirements of education and health. It is further very desirable and not difficult in allotting tasks to keep in view the leading constitutional characters, as well as any marked personal aptitudes or disabilities such as are illustrated by the learners in every school. We are aware that these facts are, to a greater extent than is commonly known, recognized by judicious teachers throughout the country. It is equally true, however, that, whether from a fault in the system or in those who administer it, evidences of overwork are far from uncommon.

It should also be kept in mind that school children are not invariably well fed, and come from unsanitary environs where wholesome air is a rarity, and it may consequently be necessary in certain cases to evoke somewhat cautiously the efforts of a brain incompetent through hunger.

This reminds us of a form of punishment so often adopted by injudicious teachers. No one, probably, has seriously denied the need of some form of correction, but in applying it, however, some regard must be had to the type of the child under correction. The objection to such as imply confinement indoors is a somewhat important one in case where the culprit is some poorly-nourished youngster, to whom fresh air is a luxury, or in any case where the punishment is frequently repeated.

Neglect of simple rules like these and those touched upon already will probably account for some obscure and fatal ailment involving the brain in childhood, whose cause is commonly overshadowed by a general condemnation of the constitutional type.

School Strain. Nerve-storms or nerve-explosions is a phase of child-study which deserves most serious attention, because of the factors which go to make up the environment of the child—the one of school strain presents.

The important question of school hygiene and physical training is one which the State can influence more than any other factor in environment, and, as the State is responsible for the welfare, comfort, and care of both mind and body of the child, the establishment as a part of the public school curricula a department of study for inculcating modern ideas of physical training, conjoined with school and domestic hygiene, should obtain.

We must look to improved personal hygiene, especially during the training of the young, if we desire to see all classes of bread-winners so reared that they may enter upon the struggles of life both mentally and physically fit. And if this be so with the bread-winners, is it still not more necessary in regard to the genesis of the future race?

We are all familiar with instances where children have entered school with a well-poised mental and physical balance, but who, under adverse conditions, became stunted and dwarfed, both in mind and body, after a protracted attendance of school.

These adverse conditions, omnipresent in our school system, is a commentary on civilization, as they cause anomalies of which school

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strain is a factor in this direction, and the child who is liable to nervous storms, express themselves in emotional displays, restlessness, explosions of anger, nagging propensities, egotism or convulsive tendencies, which may at the onset be destitute of moral or mental significance. They are removable by removing the school strain and its consequences. If strengthened by protracted existence they intensify moral and physical degeneracy. Attention to these physical states by providing suitable training, conjoined with strict observance of the laws of hygiene and indoor sanitation, will prevent the development and is oftentimes a cure of these conditions and the resultant moral or mental deterioration.

School work should be adapted to the condition of the child; and, no matter what excuse may be made for the practice as a part of our school system, it is unjust to require the feeble to exceed their powers, that they should be expected to rival their robust companions in walking, running, bicycle riding, gymnasium exercises, or field sports. Schools should be provided with a dynamometer for testing muscular insufficiency; these tests should be made quarterly during the scholastic term, or oftener as individual cases may demand.

School Hygiene. The subject of school hygiene, with intelligent physical training, is one of the most important subjects which can be presented in the public school system, for without proper observance of the laws relating to health the child is inhibited from intellectual training, and, in proportion as the public school service masters the subject and carries the principles out in a practical way, by the observance of tact in its administration, will we find children improve under its care and become strong and hearty, *mens sana in corpore sano*.

Eye Strain. We have every reason to believe that in some of the early expressions of school strain a period of stress is marked by eye strain. These two conditions are so intermingled that by the potent or benign influences of hygiene and physical training prevention on the one hand and a cure on the other obtains.

We shall not consider at this time errors of the refractive apparatus of the eye, so often brought about by the stubborn persistence of school boards and others in following a medieval "system" of school hygienics, for when errors of refraction exist without the adoption of suitable prophylactic or mechanic measures for their correction, it places the eye under a corresponding disadvantage and precipitates all the sooner a failure of clear and comfortable vision, and oftentimes with results disastrous to sight.

Of all the ready methods of measuring the health standard of a people, I know of none on which reliance can be more safely placed than on the number of those whose vision is impaired.

The use of glasses is not in itself objectionable, on the contrary, to be commended, but the increasing demand for glasses among those who have hardly passed their first youth is a different matter. So far as this depends upon causes that are preventable (not by the reckless and injudicious use of unsuitable glasses) calls for serious consideration.

Imperfect light, bad print on unsuitable paper, impure atmosphere, faulty ventilation, overheated and crowded school-rooms, unwholesome water supply, lack of suitable recreation halls and ground, ill-fitting school furniture, too long continuous study hours impair muscular tonicity, so needful to keep up eye-tension for acute visual requirements.

Official statistics, the results of examinations made by competent investigators in all parts of the civilized world, conclusively prove what an important bearing the question of light and ventilation alone has to do with the health of school children, and discloses the fact that myopia increases with attendance of schools. It is generally believed, both in England and in this country, that hypermetropia greatly exceeds the occurrence of myopia. I am not altogether inclined to this opinion, for we are rarely in a hospital—and I may add in private practice—consulted about slight degrees of myopia, as it gives little or no inconvenience. On the other hand, a very slight degree of hyperopia may incapacitate the seamstress, mechanic, stenographer, clerk, student, or those who work at close range, so that whereas we get all degrees of hyperopia, we are only applied to in the higher degrees of myopia.

Further, a myope of one diopter will require no glass at the age of forty-five (M. 1 D.+Pr. 1 D.=0). If the myopia be 4.5 D., then the patient will hardly require a glass for a reading distance of 22 cm., consequently the oculist is not likely to be consulted in cases of this class.

Most people imagine that those who do not require glasses with advancing age have very strong eyes. This is proof positive that they had myopia, though probably you will be unable to convince the patient of this fact.

Reassembling of Schools. The time for reassembling of schools after holidays reminds us of the important duties connected with such an event in the way of preventing infectious diseases among scholars. It often happens that an outbreak of disease is caused by want of care

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on the part of school authorities, as well as that of the health department, or a selfish disregard of the consequences to other children on the part of parents who send their sons and daughters back from an infected home without any warning to the teacher.

We would impress upon superintendents and teachers the importance of making inquiries in the case of all their scholars whether there has been any illness in their homes, or in the homes from which they return to school. The health department of a city, or the medical officer of a district where schools are located, should be compelled by law to notify superintendents or teachers in charge of schools of any outbreak of contagious diseases in a household, by sending the names of all persons affected, as well as the names of children who, from their surroundings, are likely to suffer from or carry contagion to others.

We should strongly impress upon parents and guardians the straightforward avowal and full information respecting cases of disease in their household or neighborhood, for such a course is of the highest importance in the interest of their own children.

In schools to which a medical officer is attached it would be an excellent rule to have all the pupils paraded before him the day or day after their return to school, when he might carefully note any who seemed out of health or condition, and see them daily for the first week or two of the term. The duty of a medical officer of a school should be more that of prevention than cure—those questions comprehended under the head of prophylaxis—thus saving the pupils from dangers of serious disease, but also from secondary ill-health, which not infrequently follows.

LOUISVILLE.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, June 30, 1899, William Cheatham, M. D., President, in the Chair.

The essay of the evening, "Cerebro-Spinal Meningitis," was read by William Bailey, M. D. [See p. 201.]

Discussion. Dr. J. G. Cecil: The subject is one that has been of intense interest to me during the past season, especially since the first of January, 1899. My experience with cerebro-spinal meningitis has

been very sad and unfortunate, perhaps not more so than that of others. I have seen eight cases of cerebro-spinal meningitis during the last season, and seven of them have died. Possibly there may have been an error in diagnosis in some of these cases, for in several of them I only saw the patients a few times, once or twice in two of the cases, in consultation, and the symptomatology and course of the disease were not such as to make the diagnosis very evident.

The first case that I saw was perhaps as typical as any seen during the whole season, in a young girl aged sixteen years, which started out and followed very closely the line of symptoms detailed by Dr. Bailey. There was intense headache, especially in the back of the head, not very much in the spine, but occasionally running down into the spine, delirium from the start, persistent vomiting from the start, and a fever which ran a very irregular course, but never very high until late in the course of the attack. There was no opisthotonos and no very great evidence of pressure symptoms, such as I take it would result from the accumulation of large quantities of cerebro-spinal fluid. She had no squint, and there was very little variation or inequality of the pupils, but there could be no mistaking the character of the disease after it had run two days. It was the first case I had seen, and it was two days before I was fully satisfied as to the nature of the disease. All symptoms increased during the latter part of the disease, the fever running very high (106° F.), and the child died on the fourth day. She had no convulsion.

The treatment that I adopted, and which my consultant in the case agreed upon, apparently had no effect whatever. There was not the slightest evidence of any effect except the constitutional or systemic effects that we would get from the medicines, which had nothing whatever to do with the course or progress of the disease, or with the final termination. The treatment adopted was that which is recognized, I believe, as the old classic treatment, viz., purging with calomel to start with, and we succeeded in getting the bowels to move; after that morphine by the hypodermic method, the ice coil to the head, and later on heart stimulants; all of which, as I have said, had no effect.

Another case which was exceedingly interesting to me, which I only saw twice, was one in which the diagnosis was very plain at the start. I gave a prognosis right at the start that was exceedingly bad. I told the parents, after conferring with the consultant, that I did not think

the child had any show to get well. This was in a boy about eleven years old, and he had symptoms which resulted probably from pressure, at least I so thought. He had opisthotonos and quite a deviation of the eyes, with irregularity of the pupils and a violent chattering delirium from the start. This boy was treated with opium, with the addition of ergot. The case was seen in consultation with Dr. Walker. I do not know how much ergot and opium were used. Cold applications were also made to the head, as in the other case, with a calomel purge, and bromide was also given. This boy, after ten days of extreme illness, recovered, and, as far as I have heard, has had no bad symptoms whatever following; there have been no sequelæ.

The other cases I have seen have ranged all the way from very young children, the youngest being only three months old, up to the last case I saw, which was in a woman sixty years of age. All the other cases have died; the only case I saw get well was the boy, eleven years old, above referred to. In none of them was there very much fever, except the first case, in which the temperature ran high. In one case I remember there was a cessation of all symptoms, leading us to make, as is often done, a false prognosis, giving the people hope and buoying ourselves up with hope, but the symptoms returned and the child finally died.

To sum up what I have to say and the result of my experience, which is limited, but which is more than I have seen during any other season, a greater number of cases, I must say that I am very much at a loss yet as to what ought to be done. The diagnosis is not very difficult when we are looking for the disease. The prognosis is in my experience exceedingly grave; and the treatment, I can not claim any thing for it at all. I am like Dr. Bailey, I hope that the future will develop some method of treatment which will be in line of what we believe to be the pathology of the disease, the serum treatment possibly. I have not been much enthused with lumbar puncture except as a means of diagnosis. I can not see much in the future in the way of treatment from drawing off the fluid from the spinal column. I am constrained to believe that in many of these cases we have a condition similar to the dry, fibrinous, plastic pleurisy or pericarditis, and possibly effusions play a comparatively small part of the disease, and that being so in these cases, certainly lumbar puncture or even the trephining operation, which I believe has been done and is now being much talked about, would offer very little hope for relief from the symptoms. The fact is,

I do not see how it is possible for surgery to do very much in the way of a cure.

Dr. A. M. Cartledge: I think I saw a case of cerebro-spinal meningitis of the epidemic variety in Louisville during the past spring. I was not sure, but in reflecting upon the matter now, in looking back over the case I can not make any thing else out of it. I will briefly detail the outlines of the case, because I would like to know if the gentlemen present think the diagnosis was correctly made. I was called to see J. H. T., aged about forty-eight years, and found him very restless. This was on Saturday morning, and I had no history other than this, that on Friday he had complained of headache, which grew worse, and his physician was sent for, who administered some quinine and perhaps some other medicine, and later a hypodermic of morphine had been given by the nurse. When I saw him he was limping incessantly across the room; he did not have any tendency to opisthotonos, but it was the reverse—emprosthotonos; he went bent up in this way all the time. He would crawl about the room, then settle down upon his hands and knees before the fire; whether the warmth of that was agreeable to him or not I do not know. He would remain there not over a minute, then would get up again and go toward the wall on his hands and draw himself up. When placed in bed he would do the same thing; that is, he would bend his back forward until his chest and knees came together. His extremities were cold, but it could be easily seen from the hard, rapid, full pulse and other evidences that he had a high fever. While he had a blank expression of the eyes, they were very much congested. I recognized the grave condition he was in, and had his physician sent for at once. The patient died the following night. He was apparently very well until Friday, when taken with a violent headache. There was no lesion by which he could have had a septic meningitis, and the question was with me whether he had cerebro-spinal meningitis, which came on with this intense headache, which increased and was accompanied by the peculiar delirium and constant moving from one place to another, etc., as I have described. He could not be kept long in one position.

All of us who do surgical work see a great deal of meningitis, and see it in other than head injuries; we see it in septic troubles, we see such cases in peritonitis, and especially in septic uteri; here we look upon them as intoxications or intense forms of infection where the germ, not alone the toxins, but the germ is carried into various por-

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tions of the body and becomes arrested in the meninges and reproduces itself there. In all forms of septic meningitis we find a reproduction of the germ in the meninges proper.

I am very glad that the subject has come up for discussion. I believe that extension of cerebro-spinal meningitis is along the nerves. I should have expected in an area as large as the cavity of the cord and brain, including the vertebræ, there would be sufficient development to give rise to infection such as we see elsewhere; probably this would be true if the patient lived long enough, or it may be, as Dr. Bailey says, that the fluids here are so pent up that they prevent it.

Dr. A. M. Vance: I recently had occasion at the request of Drs. Boggess and Bailey to do a lumbar puncture, and found, after reading the directions in Councilman's book, that it was comparatively an easy procedure, the only difficulty being the extreme opisthotonos of the child seemed to approximate the bones so closely as to arrest the needle in its passage between the vertebræ; but it was perfectly evident that the needle passed into the spinal canal, and several drops of fluid only was withdrawn. The patient was a little girl, who seemed to be desperately ill, but I understand from Drs. Boggess and Bailey that she has recovered without any sequelæ. She seemed to be approaching dissolution when I saw her.

Dr. T. S. Bullock: I have had very little experience with the treatment of the disease under consideration. My experience has been, except one case which occurred in a child, that it has been universally fatal. I have seen in this disease a temperature as high as $106\frac{1}{2}^{\circ}$ F., and yet the patient recovered. I remember in two other cases that were fatal the temperature ran up as high as 108° F. The only case of the disease I have seen in an adult ran a chronic course, but terminated fatally after several weeks.

I have been impressed with the inutility of any method of treatment, and can only express the hope that Dr. Bailey's optimistic views will be fulfilled.

Dr. F. C. Simpson: I have only seen one case of cerebro-spinal meningitis that did not die. In 1884, when in Bardstown, Kentucky, I remember having seen an epidemic of cerebro-spinal fever, and out of seven cases, six of which I saw, they all died except one in a child which recovered so far as the attack of cerebro-spinal fever was concerned and died afterward; it was left with distressing sequelæ, having epileptic convulsions, and died during an attack three years afterward.

These cases all died promptly. I think four days was about the limit after the beginning of the attack. They were all attacked very much alike, and, as already stated, all died. I saw no opisthotonos in any case. They began with headache, with severe pain about the back of the head and along the dorsal region of the spine. They went on, and in about forty-eight hours passed into violent delirium, then into a comatose condition, and death soon supervened. They were all in grown people except one. Out of seven cases they were all in people whose ages ranged from twenty to thirty.

I have seen two cases in Louisville during the last winter, and they both died so promptly that little or nothing could be done. One case was seen with Dr. Cecil. In another case of my own there was some doubt for two days as to the nature of the disease. The patient was out to the theater Friday night, and sent for me on Saturday morning because of pain in the back of the head and along the spine, most severe at the base of the brain. I gave her an hypodermic of morphine, after which she became quiet and seemed to be in good condition up to Saturday afternoon. That night I gave her a purge with calomel, and during the night at three o'clock they sent for me, as she had commenced vomiting. I thought possibly the vomiting was the result of the calomel she had taken, but the next morning I was inclined to doubt if the calomel had any thing to do with it; she had then developed spots over almost the entire body; she had a typical herpes, still intense pain in the head, and she complained of great pain along the spine. I never saw any one that complained so much of pain along the dorsal region. She went along from bad to worse, and died on the fourth day. A remarkable thing was that there was a rapid accumulation of fluid somewhere, and she died from paralysis of respiration. Her pulse beat for some time after she ceased to breathe. It was a typical case of cerebro-spinal meningitis.

As far as treatment is concerned, I have never seen any good results from any method that was employed. I do not believe, after fifteen years' experience with the disease, we are any nearer the proper treatment than we were when the malady first made its appearance. These conditions are of such a character that I believe the fluid only plays a small part in the destruction of the patient.

As regards spinal puncture, I think this is of value only in making a diagnosis; it is of no importance as far as treatment of the disease is concerned.

Dr. W. O. Roberts: I do not believe any thing is to be hoped for in the way of surgery in the treatment of these cases.

Dr. J. M. Ray: I would like to ask where the article of Councilman can be procured. Dr. Bailey speaks of the fluid as being purulent; is it purulent or is it plastic? I have seen three or four cases where the exudation was plastic in character.

Dr. William Cheatham: I have been looking up this subject lately, and have written a paper on the eye and ear complications of cerebro-spinal meningitis, which was read before the Louisville Clinical Society.

I would like to ask Dr. Bailey if in his experience the eye and ear complications have not nearly always been peripheral in character. Take the ear complications, for instance; the body of the nerve is seldom involved; it may go on to suppuration and break through into the middle ear and through the drumhead, and you might then have a purulent inflammation of the middle ear. There is no tissue of the eye that escapes, I think. Very often in the beginning of the disease there is a violent conjunctivitis, yet the germ has never been found in the conjunctival sac. The cornea becomes involved, I think, from exposure of the eye; we have a dry keratitis, but not a purulent keratitis. We have iritis in this disease; the lens becomes involved, and cataract sometimes follows. I would call Dr. Ray's attention to the fact that the books state that the inflammation in the eye is plastic or sero-plastic. It resembles a glioma. The blood-vessels running over the surface resemble very closely a glioma. The optic nerve is often involved. There is first a simple hyperemia, and atrophy of the optic nerve nearly always follows that.

I have seen a great many cases of eye and ear involvement from epidemic cerebro-spinal meningitis. I have seen several cases from Henderson County, where the disease has prevailed for some time. I had two cases in one day brought to me from different sections of the county; one, a little child, was absolutely blind; another child, three or four years of age, was deaf from involvement of the internal ear. The woman who brought the first child to me said that out of five cases that had recovered in her section of the county, every one of them was either deaf or blind, and some of them both.

I heard a paper read not long ago by a gentleman in this city who stated that he had seen several hundred cases of this disease, and who is so sure of opium that he said if you make an early diagnosis and

begin opium early in the treatment of the case, that it will give wonderful results.

The point to which I desired to call particular attention is that the eye and ear complications are nearly always peripheral in character, and it looks as if there might be a ptomaine which is responsible for these complications. The abductor nerve is most commonly involved, and also the motor oculi; the special senses are the first to become involved. I forgot to state that the orbital tissue is sometimes affected.

Dr. J. M. Ray: I would like to ask if there are any characteristic eye symptoms beyond a plastic exudation in the choroid, etc., because in tubercular meningitis we get similar eye symptoms, especially motor oculi paralysis. I have seen many cases in children where coma existed in tubercular meningitis in which the motor oculi was involved. I have also seen a few cases of cerebro-spinal meningitis, and have not seen any of the ocular muscles involved in those cases.

Dr. William Bailey: The paper of Councilman is embraced in the report of the Board of Health of Boston. I want to call attention to the fact that of the one hundred and eleven cases reported by this author as occurring during the months of April, May, and June, only seven cases occurred after the age of forty years. There were not so many in very young children as after sixteen and from that on to thirty particularly, but only seven beyond forty years.

I would like to say further in regard to the symptomatology that fever does not seem to be an important factor. Some of the gravest cases only for a few days show an elevation of temperature, and then not very marked; it is stated, however, that most of the cases have a primary elevation of temperature, as it is called. The only other elevation occurs just preceding death. In connection with that I would also have you remember that there is an absence of the normal relation between the temperature and the pulse. I have seen some of these cases with a high temperature running up to 103° and 104° F. with a pulse of under 80 to the minute, pulse practically normal, and it will be so during weeks of the disease if the patient lives that long, with the temperature varying from normal to 104° F. Consequently we can not rely upon either the temperature or the pulse to denote the gravity of the disease. This renders the condition more grave than diseases where the pulse responds with the temperature. I would rather see a patient whose pulse will go up and down as does the tem-

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perature than to see it remain normal notwithstanding the variations of temperature.

In regard to the eye complications, authorities are not, I think, very fully agreed. I think it is recognized that in the epidemic form particularly there is a transmission by means of the nerve or tissues immediately adjacent to it, and in some way there is a degeneration of the nerve and involvement of the nerve no doubt very quickly.

The authorities report the exudation primarily as being purulent; how this germ can produce pus, if it does, I do not know, but they describe it as a purulent exudation even in those cases where they die in twenty-four hours. Whether there is a mixed infection, or whether this germ is capable of producing a pus formation, as well as the streptococcus and others, I do not know. But I know that the authorities claim that the chambers of the eye are filled with pus in two or three days after the eye becomes involved. Of course much of the involvement is in the conjunctiva and cornea, and from our inability to protect the eye, particularly the cornea, I think they describe the lesions that occur in the cornea as being due to this exposure; but at the same time there is involvement of the inner layers of the cornea, which does not come from that being a part of the disease. Choroiditis and iritis are both common as eye manifestations of this disease; but I am inclined to think that it is not in the true sense of the word a metastasis, but rather an extension of the disease, as it is disposed to extend into other nerves; the nerves going off from the spinal column are often found to be degenerated, showing that the disease is disposed to follow these centers. Pus is found, and germs are found within the pus cells. There is no germ found in the fluid; the germ is inside of the corpuscle, whether it be leucocyte or whether it be pus cell; the germ is found inside of these, and is not found loose in the fluid part of the exudate. The germ seems to remain in the cell, hence it is called intercellularis.

I think mistakes may be made in regard to lesions of the eye in connection with this specific epidemic trouble, because we have meningitis produced by other causes as well, such as I have mentioned, viz., the pneumococcus, streptococcus, tubercle bacillus, etc. These are all capable of producing meningitis, but in the epidemic form there is more extensive involvement than in any of the others.

Referring to the case detailed by Dr. Cartledge, I would be inclined to think it was more distinctly a cerebral trouble than spinal with the symptoms described, and it does not conform to what I have seen in

connection with the epidemic form of the disease. That is, these cases of the epidemic form have little retraction of the head; they have opisthotonos rather than a fixed condition maintained; the head is bent backward, and if you put your hand on the back of the head and raise it, the patient always complains of pain, and will resist your doing it again.

There is one other symptom to which I want to allude that has presented in a few of the cases I have observed since it was published, and I regard it as of value. It is known as Kernig's symptom, viz., to flex the thigh upon the body, then ask the patient to extend the limb. That is a feature Kernig claims to be almost pathognomonic meningitis. I have tested it in three cases, and it seems to be a sign of marked value. It shows that degeneration or changes have occurred in the nerves.

In regard to present observations of the disease: Most of the cases I have seen have been in consultation. The first four I saw died very promptly. The first one was a young man, about twenty-eight years of age, who was then in the third or fourth day of the disease. The skin lesions were very marked. He went on and died on the fifth day. I saw him only once. I saw then, I think, three other cases that died. More recently I have seen two extreme cases that seem to be recovering. One has been referred to by Dr. Vance, seen in consultation with Dr. Boggess, a little girl, eight years old, who is now at about the end of the second month, and is recovering apparently without complication or sequelæ, all her faculties seeming to be maintained. Another case was a young man, twenty-six years of age, who was taken the night after an entertainment at the Auditorium, during which there was a very hard rain, about eight weeks ago. He came away from the entertainment, and before morning had an intense diarrhea with a feeling very much as is described in an attack of grippe; intense headache, and particularly did it affect the back part of his head and upper part of the spine. Pain was intense and vomiting was prompt; from the beginning he had hyperesthesia almost everywhere. While sitting on a chair he could not extend his legs, but could extend them easily and rapidly when upon the bed or when standing upon his feet, but could not bear the extension when sitting. At one time his temperature was subnormal, yet his pulse remained normal; there has not been a time in the entire eight weeks of the disease that his pulse has been over 80 to the minute, and there is now some question whether he will

ultimately recover because of impaired vitality on account of his inability to take food, not being able to retain any thing, vomiting being so persistent. I left him at six o'clock this evening sitting up in bed eating supper with a relish, and it seems as if he is going to recover, perhaps without any complications.

I have seen no eye or ear complications in any of the cases that came under my observation. There has been nothing in the three cases that I am seeing now that are apparently recovering, nor has the treatment been different from the others. Comfort has been promoted by the use of opium. I believe this is of service in securing comfort; I have used bromide, iodide of potassium, bichloride of mercury, etc., and am inclined to think that if there is any thing that will accomplish something toward absorption and removal of the products of infection, it would be by the iodides and mercurials. If any thing would do good in aiding more rapid and complete removal of these products, it would be through the administration of these remedies.

The ice cap, ice coil, ice to the spine, etc., have been used, and seem to make the patient rest better when he is restless; ice applied to the head and spine gives comfort and ease. But this is a subject which is not yet worked out fully, and I do not think it can be in the present discussion.

THOMAS L. BUTLER, M. D., *Secretary.*

Reviews and Bibliography.

The Hygiene of the Mouth. A Guide to the Prevention and Control of Dental Disease. By R. DENISON PEDLEY, F. R. C. S. (Ed.), L. D. S. (Eng.), Dental Surgeon to the Evelina Hospital for Sick Children, Southwark, London. With numerous illustrations. 93 pp. Price, \$1.00. Published in London by J. P. Segg & Co. In America by the S. S. White Dental Mfg. Co., Philadelphia.

The author addresses himself in this little work to the consideration of the causes leading to the early decay of the teeth under the conditions of civilization, to the effects of this on the health and efficiency of the citizen as a workman or soldier, and the appropriate treatment. Except as to the particular cases and statistics he gives, there is nothing in this that has not been given in other works.

As to the outcome of his treatment in the case of those whose bad health results from decayed teeth or is supposed to result from them, the work has the shortcoming almost universal with brochures, that the size of the book does not admit of mention of those cases that do not get well under the particular treatment. It measures out all right, however, if we assume

that the author rejected, as arising from some other cause, all the cases that did not promptly get well.

The work is well written, and is a strong plea for early and thorough care of the teeth.

D. T. S.

The Newer Remedies, Including Their Synonyms, Sources, Methods of Preparation, Tests, Solubilities, Incompatibles, Medicinal Properties, and Doses as Far as Known, Together with Sections on Organo-Therapeutics, Agents, and Indifferent Compounds of Iron. A Reference Manual for Physicians, Pharmacists, and Students. By VIRGIL COBLENTZ, A. M., Phar. M., Ph. D., F. C. S., etc., Professor of Chemistry and Physics in the New York College of Pharmacy, etc. Third edition. Revised and very much enlarged. 147 pp. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

The title of this book is its appropriate description, to which little can be added as to the character of its contents. The multitude of new remedies, the false claims that have been made for them by those who brought them out for sale, the more than worthlessness of the great majority of them would indeed furnish text for many an appropriate sermon, but not exactly in the line of review. It is a curious commentary on the thoroughness with which little enlightened peoples tested the medicinal virtues of plants, that with all the extension of modern research, the leading and even indispensable medicaments are prehistoric in origin. Opium, iron, quinine, and coca, though presented in refined preparations by modern skill, antedate history in their use, and bid fair to hold their own against any new product of mine or forest. There must come a time, perhaps in the not very distant future, when out of the confusing multitude of remedies those fit to survive will be selected, and vast numbers that have answered no good purpose but to compensate by their sale the investigator while engaged in pushing the line of chemical science will be relegated to their deserved obscurity.

D. T. S.

Practical Anatomy: Including a Special Section on the Fundamental Principles of Anatomy. Edited by W. T. ECKLEY, M. D., Professor of Anatomy in the College of Physicians and Surgeons, University of Illinois, etc., and Mrs. CORINNE BUFORD ECKLEY, Instructor in Anatomy in the Northwestern Dental School; Professor of Anatomy in the Northwestern University, Woman's Medical School, etc. With 347 illustrations, many of which are in colors. 485 pp. Price, cloth, \$3.50; oil cloth, \$4.00. Philadelphia: P. Blakiston's Son & Co. 1899.

Possessing some of the ablest and best written newspapers in America, with its multitude of schools and universities and a growing reputation as a book-making metropolis, Chicago should see to it that a book of the pretensions of this should not go out characterized by such English as this exhibits.

In the second sentence of the preface the author gives us "continge," an obsolete word, dropped probably because so different in sense from its derivative, contingent, and in the third we are told that "those *areas* of the body that can not under existing conditions be profitably studied in the

dissecting-room are properly presented by the lecturer on anatomy." Surely the *areas* of the body are not better studied anywhere than in the dissecting-room. In another sentence we are told that "the gross anatomy . . . will be considered, while the student will be referred to Morris for the special anatomy of each individual organ," as if the special anatomy of each organ did not embrace equally its gross and minute anatomy. On page 120 we are told that scalp, calvarium, and meninges are severally *collective nouns*, and must be reduced analytically to their simplest terms of individual structures. We suppose the author would make haystack a collective noun because made up of straws.

An effort is made to incorporate a colloquial style into the work in supposed imitation of oral teaching, and such expressions as "You will see," "You will find," "Can you imagine," "Can you remember," etc., occur perhaps thousands of times to the distraction of the student's attention and the waste of his time and energy. It seems indeed a remnant of the kindergarten.

Now for the merits of the work. It is based on Morris' superb text-book on anatomy, imitates it in the matter of accuracy and apt method of illustration, borrowing many of its cuts and going outside for many others that are excellent. For the student who has bought or may buy Morris and thinks it too fine or too bulky to knock about at the dissecting-table, this will make an excellent dissecting-room companion, due care being taken by the student not to fall in with its semi-childish, semi-foreign dialect.

D. T. S.

American Pocket Medical Dictionary. Edited by W. A. NEWMAN DORLAND, A. M., M. D., Assistant Obstetrician to the Hospital of the University of Pennsylvania; Fellow of the American Academy of Medicine, etc. Containing the Pronunciation and Definition of over twenty-six thousand of the Terms Used in Medicine and Kindred Sciences, along with over sixty Extensive Tables. Second edition, revised. 518 pp. Price, \$1.25. Philadelphia: W. B. Saunders. 1899.

In his preface the editor tells us that a large edition of the work having been exhausted in six months, he has taken advantage of the opportunity afforded by a new edition to correct a few typographical errors and to insert a number of the more important new words added to medical literature during the last few months, his aim being to make the book represent as far as possible the present state of medical lexicography. Accurate, beautiful, handy, and cheap, little wonder that it sells.

D. T. S.

The Treatment of Pelvic Inflammations Through the Vagina. By WILLIAM R. PRYOR, M. D., Professor of Gynecology, New York Polyclinic, etc. With 110 illustrations. 248 pp. Price, \$2.00.

In this book the author directs the attention of the general practitioner to a surgical treatment of the pelvic diseases of women. He belongs to the radical school, and inculcates as a rule aggressive surgical interference. Recognizing that there exists great confusion among the profession regard-

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ing the most successful methods of treating pelvic inflammations, he has sought to put down every detail of such treatment, and especially to prepare those who may accept him as a guide for every probable emergency.

The style is terse and direct, the several subjects well illustrated, and few authors have managed to get more into an equal number of pages.

D. T. S.

Pulmonary Tuberculosis: Its Modern Prophylaxis and the Treatment in Special Institutions and at Home. ALVARENGA. Prize Essay of the College of Physicians and Surgeons of Philadelphia for the year 1898. Revised and enlarged, with descriptions and illustrations of the most important Sanatoria of Europe, the United States, and Canada. 343 pp. Price, \$3.00. Philadelphia: P. Blakiston's Son & Co. 1899.

In the fullest sense this work accords with its title. It is a complete resumé of the various methods in vogue for the treatment of this insidious disease, and a detailed description of all the important places of resort accessible to Americans and Europeans suffering from it or threatened with its attack.

As far as the author's contributions of original ideas is concerned, he has met with the common experience of being able to make small addition to the stock of knowledge. But he has sifted what is known and produced a book that must be most helpful to every one who is placed in a position to advise those who suffer from or need to guard against this fearfully fatal and widespread disease, or who must act on their own initiative. D. T. S.

The Hygiene of the Transmissible Diseases: Their Causation, Modes of Dissemination, and Methods of Prevention. By A. C. ABBOTT, M. D., Professor of Hygiene and Bacteriology, and Director of the Laboratory of Hygiene, University of Pennsylvania. Illustrated. 311 pp. Price, \$2.00, net. Philadelphia: W. B. Saunders. 1899.

The first essential of a popular book, that it shall have an attractive style, may be most justly claimed for this. It has the second also, of interesting matter.

The author does not propose to present the subject of hygiene in the comprehensive sense ordinarily implied in the word, but aims to deal principally with the section embracing a knowledge of the preventable specific diseases.

The author has no fads or hobbies, but has given here, in a succinct form, the gist of what the world of science has discovered as to the means and media through which specific contagious diseases are communicated, in so far as these have been discovered or ascertained, and also the most effectual methods for the prevention of such diseases. It is a high-class work.

D. T. S.

THIRTEEN DOLLARS FOR FOUR DOLLARS.—A book the price of which when originally published was twelve dollars alone and a year's subscription to the *New York Lancet* (Address 156 Fifth Avenue, New York), is

offered for four dollars. The book is Flint's "Encyclopedia of Medicine," a work covering practically every subject in medicine. New, revised, 1898 edition; 1558 pages; 8vo; cloth. As has been aptly said, "A book for the desk and not for the shelf." Thousands of endorsements have been received.

David Ralph Bowen, M. D., says: "After several weeks of practical use I must say that I can not see how you give so much for the money. I have a very good library, but when I want an idea *quick* I go to Flint's Encyclopedia. It serves to review, and not rarely to give points not found elsewhere. I feel it my duty to thank you for such a book."

The Medical News says: "The text is brief, clear, and explicit. As a volume for ready reference it occupies a field wholly by itself."

The Dominion Medical Monthly: "Judging from the ability of the over two score leading English and American contributors, also from the scope and character of the work, one is compelled to acknowledge its great value as a book of reference."

Abstracts and Selections.

HEMOLUM HYDRARGYRO-IODATUM AS AN ANTISYPHILITIC.—Jordan, A.—The value of hemolum hydrargyro-iodatum as an antisyphilitic. (*St. Petersburg. med. Woch.*, No. 20, 1898.) This new preparation was introduced for internal use by Kobert. It contains beside iron 12.35 per cent metallic mercury, and 28.69 per cent iodine. Jordan used it on seven cases of syphilis in the following form:

R Hemoli hydrargyro-iodate, ... 8.0

Extr. et pulv. liquirite, ... q.s.

ut. f. pilul. No. 50 to be taken in increasing doses from six to ten pills a day. In one of these cases it had to be discontinued on account of salivation, but was well born by the remaining six. In two women the syphilitic lesions rapidly disappeared, while on the men this result was very much delayed, so that other agents had to be resorted to.—(*From Therap. Monats.*, 1898, p. 522.)—*The Dominion Medical Monthly*.

FARADAISM IN DILATATION OF THE OS UTERI.—Dr. Jeannie W. Martine (*Journal of Electrotherapeutics*, December) describes a dilator similar to Nott's dilator, which is connected with one pole of a faradaic battery by one terminal, and by another with a large pad which is placed on the abdomen. The anesthetic effects of the fine wire faradaic coil are, according to the author, of material assistance. Dr. Martine says:

"I have used this instrument in a variety of cases. I wish to mention one class where the physician does not, as a rule, consider divulsion necessary. I mean in subinvolution complicated with endometritis; here divulsion causes: first, drainage; secondly, it acts as massage and sets up

a better circulation. The electricity helps us here by its stimulating properties more than its anesthetic effects, as the uterus is rarely sensitive in subinvolution. My electrical dilator is one of my best friends in nearly all cases of uterine disease, and it can, of course, be used with the galvanic as well as faradaic currents, and I have yet to see a case so sensitive that I could not dilate by its judicious use. It is indeed simply wonderful how the long, fine wire coil of an Engleman faradaic battery will benumb the parts so that little or no distress is felt. I, however, give myself plenty of time in treating sensitive subjects, and only do very little at each treatment. One important point I wish to mention: The anesthetic effect of electricity, faradaism at least, is only felt while the current is turned on, and this is the objection to using graduated sounds, much pain being caused by withdrawing, turning off current, and reintroducing a larger size. Theoretically why this is the case I can not say; practically I know it to be so; but the instrument I have described allows current to flow while we are dilating, and overcomes that difficulty."

This procedure might be worth a trial in stricture of the urethra, though the catalytic properties of the faradaic current are slight as compared with those of galvanism.—*New York Medical Journal.*

SOME CONDITIONS NECESSARY FOR THE SPREAD OF TUBERCULOSIS.—Arthur Ransome (*Extrait du Congrès de la Tuberculose*, Paris, 1899) eight years ago, in conjunction with Dreschfeld, found that sputum containing quantities of tubercle bacilli retained its pathogenic properties for months when exposed to the air in a small unhealthy hut, built without a basement on a clay soil; while another sample, exposed in a well-ventilated house built on a sandy soil, and with good sanitary arrangements, lost its virulence completely. In 1894, conjointly with Delépine, he found that over three days' exposure to free ventilation alone was required to disinfect sputum or pure cultures, while a very short time sufficed when they were exposed to air plus sunshine. These experiments suggested that there must be some substance in the air of confined spaces which favored the growth of the bacillus. Ransome has now obtained a liquid containing such a substance: (1) by freezing the expired air both of healthy and phthisical subjects, and (2) by condensing the vapors arising (a) from the contaminated soil of a town, (b) from a clayey, and (c) from a sandy soil. After estimating the free and saline and the albuminoid ammonia contained in these liquids, he thoroughly sterilized them, and then soaked pieces of folded filter paper or of ordinary wallpaper in them. Paper thus treated, whatever the original source of the liquid might be, proved to be an excellent culture medium when inoculated with a pure culture of the tubercle bacillus. Out of eighteen specimens, sixteen produced more or less vigorous colonies, and, of a second series of thirty-seven, only one failed to grow even when kept at ordinary temperatures. In the first series a little glycerine was added to the liquid, but in the second equally good growths were

obtained on the soaked paper without this addition. These experiments prove conclusively that the tubercle bacillus is a saprophyte as well as a parasite, and that it can grow in the organic matter contained in expired air or in the vapor arising from the soil. They indicate also the nature of the danger of insanitary houses, and how the peril is to be avoided by the disinfecting action of sunlight and fresh air.—*British Medical Journal*.

THE CHEMICAL NATURE OF THE ACTIVE PRINCIPLE OF THE SUPRARENAL CAPSULE.—Ever since the announcement by Shaefer and Oliver of the peculiar action of an aqueous extract of the suprarenal capsule on the blood-pressure, great interest has been aroused, followed by much speculation on the nature of this body. The profession know the chemical difficulty of extracting alkaloids, which are perfectly well-known, by methods equally well-known, but here was a substance very easily oxidized, which occurred in the suprarenal gland in quantities of probably less than a fifteen thousandth part of a grain to each gland, and that if the nature of the substance were known, and a perfect method of extraction had been devised, it would require the glands of 2,000 sheep to give us one dram of the active substance. When we consider the amount of proteid and other material which must go into solution, we can conceive the almost hopeless outlook for the solution of this problem. If the problem was to be solved, it would be expected, as in the past, that its solution would come from some of the large German laboratories by a man who had spent his life at this work, and who had at his back one of those German factories who make it their business to encourage all this class of scientific research, from the simple knowledge that one discovery may mean a fortune to them. It is therefore a source of unbounded pleasure and pride that we are able to announce that for the first time the laurels have been captured by our own continent, by the discovery, identification, and analysis of the active principle of the suprarenal body by Dr. John J. Abel, Professor of Pharmacology, Johns Hopkins Medical School. The first step in this work is what is chemically known as benzoating the body, obtaining thereby a pure benzoate. This work, which was published by Prof. Abel last year in Johns Hopkins Hospital Bulletin, as also in this paper this year, was subsequently confirmed by a German scientist, Furth, who was working on this problem. After obtaining the benzoate, Professor Abel then made other compounds, and as the result of his analyses he considered the empirical formula to be $C_{17} H_{15} NO_6$, thus approaching in elementary composition some of the alkaloids. The composition of pseudo-morphine, for example, is represented by $C_{17} H_{19} NO_6$, that of cocaine by $C_{17} H_{21} NO_6$, that of sanguinarine by $C_{20} H_{15} NO_6$, and that of benzyldene collodine dicarboxy acid by $C_{17} H_{15} NO_6$, and among these alkaloids sanguinarine is noteworthy for its power to raise the blood-pressure. It was found that skatol was one of the decomposition products of this body. It is of interest to note in this connection, as the author

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points out, that Stohr has shown that skatol is liberated when strychnine is heated with calcium oxide, and that Hoffmann and Konigs have obtained indol from tetrahydroquinoline by passing its vapor through a tube heated to redness. He considers the picrate will likely prove the easiest to manipulate and most valuable, and promises future contributions in regard to it. There is no doubt that the future of medicine lies in the domain of biological chemistry. It is there the greatest triumphs will reward the investigator and the greatest benefit accrue to medical science from the practical application of his results. We can rest assured, however, with such a distinguished investigator as Professor Able to head the school of biological chemistry here, that in the future we will have to share very few of our triumphs with Europe.—*The Dominion Medical Monthly*.

A NEW PROTEID IN MILK.—To the three proteids already known to exist in milk—albumin, globulin, and casein—a fourth must now be added which has been named by its discoverer, A. Wroblewski, "opalisin" from the opalescent appearance of its solutions. M. Wroblewski has given a description of it in Hoppe-Seyler's *Zeitschrift fur Chemie*. It exists in largest quantity in human milk; a similar if not identical substance is less abundant in the milk of the mare; and there is yet another, which, however, only exists in very small quantities, in the milk of the cow. Its percentage composition is: C, 45.01; H, 7.31; N, 15.07; P, 0.80; S, 4.70; and O, 27.11. This new proteid does not reduce Fehling's solution after boiling with hydrochloric acid, and it yields no pseudo-nuclein when digested with pepsin. For the solution of one gramme 121.3 c. cm. of a solution of soda containing 1 part of the alkali to 100 parts of water are required. It responds to the biuret, Millon, and xanthoproteic tests, and also to that of Adamkiewicz. It was obtained by the addition of sodium chloride to the fluid remaining after the precipitation of the casein in human milk by hydrochloric acid.—*Lancet*.

THE CURABILITY OF PULMONARY TUBERCULOSIS BY INTENSIVE MINERALIZATION.—Dr. N. Dimitropol, of Bucharest (*Gazette hebdomadaire de medecine et de chirurgie*, July 17, 1898), says that the etiological study of pulmonary tuberculosis shows that the most favorable soil for the development of Koch's bacillus is that in which there is a deficiency of those organic and chemical elements which, by combining with albuminoids, insure the resistance of the organism. Consequently the treatment which, according to Dr. Dimitropol, is at the same time the most rational and the most efficacious, resolves itself into an intensive mineralization of the organism combined with substantial alimentation, both natural and artificial. It is only by this means that one can build up the broken-down economy of a tuberculous subject, and not only prevent the lungs from becoming further tuberculous, but favor also the sclerotic or cretaceous cicatrization of the part attacked.

The following is Dr. Dimitropol's mode of treatment: The patient is

given daily, for thirty or forty days, each morning a nutritive mixture composed thus:

R Yolk of eggs, ... 4 or 5 in number;
Pepsin, ... 15 grains;
Hot milk, ... 12½ ounces;

the whole being well beaten up for five minutes and flavored, according to taste, with a little vanilla. Ten minutes later a slice of bread and butter, well salted to the extent of at least half a teaspoonful of kitchen salt, and weighing about twelve ounces and a half, is given. When the patients are very wasted there should be administered in addition nutrient enemata, composed as follows:

R Yolk of eggs, ... 4 in number;
Liquid peptone, ... 375 grains;
Chloride of sodium, ... 75 grains;
Hot concentrated bouillon, ... 1,200 to 1,500 grains.

This enema, well beaten up, should be slowly introduced by means of an irrigator. Each enema should be preceded by an evacuating enema.

The patient takes daily, moreover, from ninety to a hundred and eighty grains of tribasic phosphate of calcium, and from thirty to sixty grains of phosphate of sodium, as in the following formula:

R Tribasic phosphate of calcium, ... 30 grains;
Phosphate of sodium, ... 7½ grains

in each powder. From three to six daily.

After each meal the patient must also take in half a glass of water from two to four teaspoonfuls of hydro-chlorophosphate of calcium in ten per cent solution.

All the drugs enumerated should be administered in a graduated manner for forty days; toward the end of this time it is necessary to diminish the dose and to continue for six months, and to recommence later with intermissions of fifteen days a month.

Further, there is prescribed daily for thirty or forty days two hundred and twenty-five grains of common salt mixed with food already salted in the ordinary culinary preparation. It is necessary for the patients to take indefinitely from ninety to a hundred and twenty grains of salt daily.

For diet from sixteen to eighteen ounces of meat, a quart of milk, three eggs prepared to the patient's taste, fish and vegetables in habitual quantity, but chosen by preference from among those most rich in nitrogen, such as lentils, haricots, peas, etc.

Such is in general lines the treatment of the Roumanian physician; it rests with the physician to apply it according to the stage of the disease, the age and constitution of the subject, taking care to proceed gradually in every case, and to keep always in view the tolerance of the patient, both as regards alimentation, natural and artificial, and mineral treatment. The same mode of treatment may be employed in the case of mere scrofulous and lymphatic subjects, excluding the artificial alimentation. Excellent results are claimed for it.—*New York Medical Journal.*

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TO SPIT OR NOT TO SPIT.

The protest against the ancient habit of spitting which during the present decade has taken hold of the better instructed people of the civilized world should cause the hygienic philanthropist to take courage.

Not only are the aisles, corridors, and walks of our public vehicles, buildings, and places riddled of much unmentionable filth which was, whilome, an insult to decency and a menace to health, but our youth are thereby taught how ill this uncleanly habit becomes a gentleman.

Moreover, the lover of his kind must see with satisfaction in this the beginning of a reaction against that almost universal form of drug addiction, the tobacco habit, the pernicious effects of which need not be mentioned to those who think at all upon the great lets and hindrances of human progress.

But the progress so far made is only a beginning; the great work of eradication is yet to be accomplished, for the spitting habit is ancient, deep rooted, and so fixed by heredity upon the race as to have become an instinct and a superstition.

The following from the Medical Press and Circular will give the reformer some notion of the magnitude of the work before him:

"The habit of promiscuous expectoration is an uncleanly, disgusting one, but how curious it is that it should be environed with so much superstition. In days of antiquity spitting was resorted to in order to

ward off dangers, and up to the present time luck is wooed and misfortune avoided by the process of spitting. Newborn children are treated to a lavish expectoration by midwives in certain parts of the country; fishermen spit upon their hooks after baiting them, and it is considered to be absolutely essential before washing in the same basin in which a friend has washed to spit into it, for otherwise a quarrel would be sure to follow. But it is on the Continent that the superstition of spitting seems to reach its worst degree. In Oldenburg, for example, the loathsome custom prevails of always spitting three times into the kneading trough. Again, babies in Hungary are especially singled out as objects of the superstition; the custom there is to spit into the babies' faces in order to bring them good luck. Imagination almost fails to picture the filthiness and danger of such a disgusting act as this. In Silesia and Bohemia persons generally spit three times when they meet an old woman, but it is quite difficult to conceive why the presence of an aged female should thus call for such a profligate evacuation of the salivary secretion under these circumstances. Again, in Sweden a great deal of superstitious spitting seems to take place. Persons, for example, spit into their beds before retiring; playing-cards are spat upon when the luck is bad, and every new suit of clothes is made the object of a gross expectoration, but for what reason it is quite impossible to imagine. Superstitions are said to die hard, and it would seem from the above facts that the one under discussion has been endowed with a phenomenal vitality. Despite its absurdity, filthiness, and unhygienic character, it has still survived; whereas on sanitary grounds it should, without further loss of time, be 'coffined and confined' beyond all reach of resuscitation."

ALCOHOL AS A FOOD.

The advocates of total abstinence are somewhat chagrined over the fact that recent experiments made at their suggestion to determine whether alcohol could be considered a food or not resulted in the affirmative. It was determined that its effect upon the system was closely allied to food, viz., tending to sustain life and prevent tissue waste.

Whisky is also a valuable stimulant and medicinal agent. It must certainly be classified as a foodstuff under certain conditions. The numerous theories advanced concerning its deleterious influences upon the system are all worthless when compared with the actual results following its use. The value of alcohol as a food and a preventive of tissue waste was fully demonstrated during the polar expedition of

Peary and Greely. For days before the rescuing parties reached the stranded survivors the latter subsisted on a small daily allowance of alcohol and glycerine. It is certain that in this instance the vital spark was kept alive by these agents, and most likely by the alcohol. The chemical compositions of alcohol and glycerine are not so very materially different as regards the primary elements that enter into their composition, both containing carbon, hydrogen, and oxygen. These are the primary elements that go to make the great bulk of all of our food, as starches, sugars, and fats, and while the arrangement of these primary elements in the different foodstuffs varies in quantity, they are split up and form new compounds in the body, and in fact undergo an unlimited number of changes—but in the final wind-up their purpose is served by giving up to the tissues what is needful to them, and so it is with alcohol—it gives up what is necessary to support life and prevent tissue waste, and after all this is the only thing accomplished by any foodstuff.

Dr. Mitchell Bruce, in his admirable work on *materia medica* and therapeutics, in speaking of alcohol, says: "It may now be accepted as proven that, when taken in sufficiently small quantities, *alcohol is oxidized in the tissues*; and that it only passes out of the body unchanged through the lungs and kidneys, etc., when so freely given that excretions occur before oxidation has had time to take place. This decomposition of alcohol must necessarily develop vital force and heat like the oxidation of sugar, fat, and albumen. Alcohol belongs to that class of foods which do not become an integral part of living cells or tissue proteids, as do much of the albumen salts, etc., but remain in the plasma which bathes the cells, are oxidized there and constitute their pabulum, the materials which thus supply the active elements with much of their energy, the 'circulating proteids,' carbohydrates, etc. Thus it happens that alcohol can for a time sustain life when no food (so-called) is taken, as in confirmed drunkards and some cases of severe illness.

"Professor Binz, of Bonn, who has studied this question with great industry and success, has calculated how much energy is contained in a gramme of alcohol, and finds that two ounces of absolute alcohol yield about the same amount of warmth to the body as is supplied by an ounce and a half of cod-liver oil."

This is sufficient to show beyond all doubt that alcohol is a valuable foodstuff if properly used. Everybody knows that the excessive use of alcohol is injurious and shortens life, but, taken in moderation in

the shape of good whisky, it will not materially injure the body and is healthful to many. Three ounces of whisky in twenty-four hours, well diluted, is within safe limits, if the "morning toddy" is avoided. No whisky should be taken as a beverage before the noon hour or twelve o'clock in the day. When taken before breakfast or on an empty stomach it irritates that organ too much, and is taken directly into the liver and general circulation, and must prove harmful in many cases if used in this manner. At noon the morning meal has been disposed of to a degree, but the liver at this time contains many things that are not found in it after the long rest at night, and in addition the noonday meal usually follows the use of whisky at this time; if it does not, it should do so, so that the liquor may be mixed with the food, as this does much to counteract any harmful influences that it would be liable to produce, as congestion of the stomach and liver.

Considering the relative evils of alcohol and other so-called unnecessary luxuries, it is safe to say that so far as the actual injury to the physical body is concerned, alcohol in moderation is much less harmful than tobacco. The common and extensive use of tobacco makes its evil results less appreciated, but the country is full of wrecks as the result of the excessive use of tobacco. Tobacco hearts are very common, and as dangerous as they are common. The typhoid or pneumonic patient with a tobacco heart has much less chance of recovery than if he were free from the influence of tobacco.

Teetotalism can never be attained, and those good people who are urging it had better ask for moderation in the use of alcohol drinks instead of total abstinence, as there would be some chance of securing this to a degree.

Notes and Queries.

THE TRI-STATE MEDICAL SOCIETY.—The eleventh annual meeting of the Tri-State Medical Society will be held in Chattanooga, Tuesday, Wednesday, and Thursday, October 24, 25, and 26, 1899. The railroads will give reduced rates. The prospects for an excellent meeting were never better. Many of the best men of the South will be in attendance.

DO WOMEN BEAR ABDOMINAL OPERATIONS BETTER THAN MEN?—This is pre-eminently the age of statistics. Of late years so much care, ingenuity, and industry have been devoted to the compilation of tabular statements affecting pretty nearly every subject under the sun that averages alone have

come to be esteemed as worthy of notice, the salient instances by which public opinion used formerly to be in a great measure formed and guided being now regarded as of no more value than any other of the similar but obscure items in the same category. It would be difficult to find a subject in either medicine or surgery which has not been exposed to the test of figures, and especially is this the case with regard to operations. Among other points all more or less noteworthy the influence exercised on the results of surgical interference by age, temperament, nationality, latitude, season, the experience of the operator, etc., has been statistically recorded with much advantage, while incidentally these investigations have likewise been by no means barren. For some considerable time the supposition that grave surgical operations were better supported by women than by men was rather extensively entertained, but it was not until totals had been systematically tabulated that we were afforded reliable grounds for believing that members of the so-called feebler sex could endure the knife with greater advantage than those of the sex which is inured to labor and hardship. The following figures, supplied by Haberkant and quoted by Professor Tarnier in a lecture last summer, would certainly seem to afford *prima facie* evidence of the exactitude of the proposition. In 117 cases of gastro-enterostomy in the male there was a mortality equal to 54 per cent, while in 96 similar cases in the female it was only equal to 35 per cent, a difference of very nearly one fifth. In pylorotomy the discrepancy was not quite so prominent, the mortality after 70 operations in the male and 140 in the female being at the rate respectively of 64.3 and 52.8 per cent, an advantage in favor of the latter of only 11.5 per cent. As may be supposed, a great many theories have been advanced in explanation of this sexual peculiarity. In the opinion of one profound observer who has actually been bold enough to place his lucubration on record in print women suffer less than men after capital abdominal operations because it is especially characteristic of this sex to enjoy this comparative immunity. As Professor Tarnier did not fail to remark, this intelligent explanation reminded him of the well-known character in Moliere, who so strenuously maintained that opium caused somnolence because it was endowed with soporific properties! According to Dr. Marcel Baudouin, however, it is not impossible to furnish reasons which at all events are plausible for the fact that females support operations better than males. In the first place, pregnancy makes the abdominal parieties thin and flaccid, thus enormously favoring examination and consequently helping to an accurate diagnosis. Secondly, women are more prone to complain than men, especially in connection with any thing that concerns their reproductive systems. In this way their cases come under observation at an early stage when surgical interference is less of a *pis aller*. Thirdly, men as a rule hate confinement, whereas women are accustomed to an indoor life. Fourthly, women do not smoke or drink, and nature, consequently, can exert her recuperative qualities more effectually.—*Lancet*.

Special Notices.

SANMETTO ALWAYS RELIABLE IN STRENGTH.—I have one word of praise to say for Sanmetto, viz., that the last bottle gives the same results as the previous one, or in other words, Sanmetto is always reliable in strength. MARK C. MEYERS, M. D.

Kansas City, Mo.

THE TREATMENT OF INDIGESTION OF INFANTS.—For several years we have used Lactopeptine in the indigestion of infants; in fact, it is much of a routine treatment, and the results have always been highly satisfactory. Infants need it when indigestion is more or less chronic, and it will do valiant service in correcting the difficulties of digestion here encountered. In addition to medical care, much attention must be given to the hygienic surroundings of the child, its bath, its outdoor life, its exercise, the water it drinks, and the quality and quantity of food taken.—F. P. Norbury, M. D., in *Medical Fortnightly*.

EDW. L. H. BARRY, JR., M. D., Jerseyville, Ill., says: I have used Aletris Cordial with excellent results in the following: Miss R., nineteen years of age, brunette, well developed, but troubled with dysmenorrhea, called at my office and after explaining her affliction, said: "Doctor, if there is any thing you can prescribe to relieve my suffering do so, for life is a burden to me now." I thought of the Aletris Cordial at once, and gave her a six-ounce bottle, directing her to take a teaspoonful three times a day, commencing four or five days before the regular period. Several weeks afterward she returned with the empty bottle, remarking: "I've come back for more of that medicine, for it's the only thing I ever had to give me relief." I can cheerfully recommend Aletris Cordial to the profession.

A POSITIVE CORRECTIVE OF URIC ACID AND LITHEMIA.—In these days when from sedentary habits or abuses of diet the kidneys and bladder are special sufferers in the general cachexia, the physician is often puzzled in his diagnosis by a variety of symptoms in the patient over the exact cause or causes of the trouble. Usually there is but little difficulty in determining if the trouble is of a nephritic character. The sympathetic nexus between disturbances in the kidneys and bladder is such that any abnormal condition of one is reflected in the irritated condition of the other. Whether the patient is suffering from excess of uric acid or lithial deposits in the bladder, or surplus of albuminuria, the symptoms are much the same.

The difficulty just here lies with the making of a correct prognosis of the disease, whether simple and confined to one organ or complicated and involving more than one. It is a positive relief to the busy physician to know at such times that there are remedies which may come most beneficially into action in some, if not all, of the diseased conditions, and prove an immediate corrective of the leading troubles. In nearly all forms of kidney and bladder disease decided and permanent relief has been obtained from the free use of Granulated Effervescent Alkalithia, a preparation that is coming into general use for lithemic kidney and the uric acid diathesis.

Its action in eliminating the urates of rheumatism has given special satisfaction in cases where the other well-known remedies have failed, while the rapidity with which it dissolves lithial deposits renders it a boon to those who suffer from lithemia. The pleasant semi-saline taste and the refreshing effervescence of the preparation render it a very acceptable remedy to the patient. The portability and convenience in form of this true lithial preparation in contrast to all so-called "Lithia Waters" will also strongly recommend it both to the profession and to the public.

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"NEC TENUI PENNÂ."

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No. 7.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

PLACENTA PREVIA.*

BY THOMAS H. BAKER, M. D.

To the obstetrician or to the general practitioner of medicine there are few more fruitful themes of discussion than placenta previa, and the very great importance of the subject justifies the attention and earnest study that have been devoted to it.

The definition given by Rigby more than one hundred years ago has not been improved upon: "A previa is fixed to that part of the womb which always dilates during labor," and, clinically speaking, a placenta is previa when it has an attachment in the lower zone of the uterus, and partially or entirely covers the os.

Placenta previa is met with nearly eight times as frequently in multiparæ as compared to primiparæ, and is also of more frequent occurrence in hard-working women. The sudden and appalling hemorrhages constitute the only dangerous element, and there is no obstetric complication so alarming or requiring more energetic and scientific treatment.

The source of the hemorrhage has been a much-discussed and much-disputed proposition, but it is now generally conceded that this comes from the torn and lacerated uterine vessels, and not to any great extent at least from the placenta itself. Although the placenta must occupy its abnormal site from the beginning of utero-gestation, it rarely gives rise

* Read before the Louisville Medico-Chirurgical Society, July 14, 1899. For discussion see page 257.

to appreciable symptoms till within the last three months of pregnancy ; because hemorrhage, which is the first suspicious indication, rarely occurs till after the sixth month of gestation, and a uterine hemorrhage occurring after that time is due almost invariably to an abnormal insertion of the placenta. When the implantation is central, hemorrhage will occur earlier than with a marginal insertion.

Hemorrhage usually appears suddenly without previous symptoms, often during the night when the patient is asleep or perfectly quiet. Blood may have either a venous or arterial hue, and has a marked tendency to coagulate. The flow may cease as suddenly as it appeared, and may not return for eight to fifteen days, or even longer ; then another hemorrhage occurs without appreciable cause, as in the first instance, but more profuse and continuous than before. These phenomena may be repeated until labor begins, when the bleeding becomes so extensive as to seriously jeopardize the patient's life.

Treatment. Dr. William T. Lusk insists that the time to act is at the occurrence of the first hemorrhage, because delay in the interest of the child means too often the sacrifice of both lives. As we have before indicated, the first hemorrhage from placenta previa occurs after the sixth month. In case the seventh month has not been attained, delay should be counseled only in cases where the patient can be under the immediate and constant care of a competent medical attendant. At or after the seventh month, when the child is viable, there can be no reason for further delay.

Opium tends to diminish the uterine contractions, and, therefore, does more harm than good. Ergot is a remedy which is almost certainly fatal to the child and dangerous to the mother, and is most distinctly contra-indicated. Cold or astringent injections are not sufficiently powerful. Active, rapid, energetic, and effective measures are indicated, and temporizing methods are to be condemned, because we are certainly playing with two lives when we postpone active interference.

Induce labor, and do so at once. If the cervix is closed, disinfect the vagina, and then thoroughly tampon it as the most efficient means of exciting uterine contractions. In from eight to twenty-four hours the tampon should be removed, and then the cervix will be found in most cases to be dilated sufficiently to permit the introduction of one or two fingers. With this degree of dilatation, version should be performed by the Braxton-Hicks method, and an extremity of the child

brought down into the vagina. The rest can be safely left to nature, if the pains are good. If the pains are defective, slight traction on the leg of the child will not only induce pains, but will allay any hemorrhage which may have persisted.

It has been my good, or bad, fortune during a comparatively brief medical life to have met with five cases of placenta previa, occurring in four women. In these cases the maternal mortality is *nil*, but the fetal mortality is seventy-five per cent. While the infantile mortality is large, yet I feel that I have no reason to be other than pleased with the results as regards the mothers.

CASE 1. Mrs. N. W. G., aged thirty. Multipara. About sixth month of pregnancy; began with rather severe hemorrhage, which was controlled by tampon. At the expiration of six hours labor pains set in; tampon removed and a dead child delivered by version.

CASE 2. Mrs. J. B. V., aged twenty-four. Primipara. At about the eighth month of pregnancy. Was awakened in the night by a pool of blood in her bed. When I reached the house the patient was almost pulseless, complaining of great thirst; sighing respiration, cold sweat, and such an amount of blood lost as to completely saturate the mattress and soak through on to the floor. Hasty examination disclosed a vertex presentation, and also a margin of the placenta presenting through a well-dilated os. Forceps were quickly applied and delivery of a child effected. Had not my entire time been required by the mother the child could probably have been resuscitated, but by the time the mother's condition had improved the child was beyond human aid. The patient's convalescence was long, stormy, and tedious. In addition to puerperal fever of rather mild form, phlegmasia alba dolens of the left extremity occurred on the ninth day, and two weeks later the same trouble made its appearance in the right leg.

CASE 3. Mrs. W. L., aged thirty-one. Primipara. This case was to me of a most extremely unique nature. Profuse and repeated hemorrhages occurred in sixth month of pregnancy. Examination was unsatisfactory, but absolute rest in bed was prescribed, and the patient apparently recovered. Between the eighth and ninth months she was attacked with severe labor pains, accompanied with profuse hemorrhage. Chloroform was administered, the hand introduced with some difficulty into the vagina; membranes ruptured, and then the discovery was made that there were two children. Delivery of the first child was quickly effected, but the second one, and, as subsequent developments

showed, much the larger child, presented by the shoulder dorso-anteriorly, the head being to the left. Version was performed and the body quickly born, yet partly by reason of the lack of uterine contractions and partly by reason of the large size of the head, I was unable to deliver, even when the forceps were applied, before the child was asphyxiated. The first child delivered is living to-day, and the mother made a slow but uneventful recovery.

CASE 4. Same patient as Case 2. Was seized with rather severe hemorrhage while attending to her housework. In my absence a neighbor physician was called, who, without making an examination, prescribed ergot and rest. On my return home, some hours later, I was called to see her and found her condition most desperate, and death apparently imminent. Dr. Stafford was hastily summoned to my assistance. Under chloroform, examination showed clots in the vagina; cervix well dilated, the placenta centrally implanted, through which a vertex presentation could be defined. Pushing the placenta hurriedly and not very carefully aside, forceps were applied hastily and stillborn child, placenta, membranes and all delivered *en masse*. Patient discharged well in about three weeks.

CASE 5. Mrs. F. S., aged thirty-five. Multipara. Was seized with hemorrhage at eight and a half months of utero-gestation. In this case the os admitted two fingers. Manual dilatation was made; the membranes and a foot brought down. Hemorrhage ceasing and the patient's condition being fairly satisfactory, I made no attempt to finish the labor, but waited upon nature. Labor finally ended with the birth of a living child two hours thereafter, but the child, which appeared well at the time of birth, died a few hours after.

LOUISVILLE.

VITAL AND MORTUARY STATISTICS OF KENTUCKY FOR 1898, PRORATED FROM THE NATIONAL CENSUS OF 1890.

BY T. B. GREENLEY, M. D.

In the first place I will speak of the population of the United States and its decennial increase since 1790. In that year the population was 3,929,214. In 1800 it was 5,308,483; increase 35.10 per cent. In 1810 it was 7,239,881; increase 36.38 per cent. In 1820 it was 9,633,822; increase 33.07 per cent. In 1830 it was 12,866,020; increase 33.55 per

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cent. In 1840 it was 17,069,453; increase 32.67 per cent. In 1850 it was 23,191,876; increase 35.87 per cent. In 1860 it was 31,443,321; increase 35.58 per cent. In 1870 it was 38,558,371; increase 22.63 per cent. In 1880 it was 50,155,783; increase 30.08 per cent. In 1890 it was 62,622,250; increase 24.86 per cent. In the census of 1890 there were males 32,067,880, and females 30,554,370. Whites, 54,983,870; colored, 7,638,038. Death-rate of the whole population, 12.85 per 1,000—whites 12.20 and colored 14.24.

It will be seen that there has been a pretty regular decennial increase in the population of the country except the periods included in the wars of 1812 and 1861, when, of course, there was a diminution of increase due to natural causes. There was also a falling off in the regular increase during the period from 1880 to 1890; but no doubt this was due to the fault of the census takers in omitting a large number of the population, as we had no wars or epidemic diseases to produce such a result.

When I come to speak of the population of Kentucky I shall endeavor to show a great defect in this particular.

The number of children born during the last census year, 1890, was 1,670,821; deaths under five years, 307,562; stillborn, 34,102. Deaths among all classes, 875,521; males, 464,320; females, 411,191. Death-rate: Whites, 13.98; colored, 15.30. Principal diseases causing death: Typhoid fever, 27,058; malarial fever, 18,594; diphtheria, 27,815; diarrheal diseases, 74,711; consumption, 102,199; pneumonia, 76,496; cancer and tumors, 20,984; heart disease and dropsy, 55,029; diseases of the nervous system, 89,974; diseases of the urinary organs, 23,652; old age, 16,591; all other diseases, 250,080.

Population of Kentucky in 1890 was 1,858,635; white, 1,590,462; colored, 268,173. Births in 1890, 52,015. Deaths under one year, 3,231; under five years, 5,802. Deaths of all ages, 23,897; whites, 19,398; and colored, 4,479. Ratio per 1,000: White, 12.20; colored, 16.70. Principal causes of death: Scarlet fever, 105 cases; typhoid fever, 375; malarial fever, 400; croup, 259; diphtheria, 385; diarrheal diseases, 948; measles, 207; whooping-cough, 207; cancer and tumors, 286; heart disease and dropsy, 651; liver diseases, 127; diseases of the nervous system, 1,065; urinary organs, 277; old age, 413; stillborn, 390; all other causes, 3,718.

Now, I wish to speak of the defect in the census of 1890.

It will be observed that from the first census, in 1790, the decennial

increase amounted to an average of over 34 per cent up to 1870, the first census after the civil war, which was 22.63 per cent. This low increase is easily accounted for as the effect of the four years' war. In 1880 the increase came up to over 30 per cent, and in 1890 went back to 24.86 per cent. Now, how is this great falling off in population increase to be accounted for? Why, only on the ground of failure on the part of census enumerators to list all the inhabitants. There were no epidemic diseases in the country that year or during the decennial period calculated to diminish the number of our population. The death-rate was quite low, being only 13.98. From the consideration of these facts it can only be inferred, as before remarked, that a large per cent of the population was not enumerated.

Now, we will speak of Kentucky. Our population in 1880, according to the census of that decennial period, was 1,684,600, and the returns of 1890 only gave us 1,858,600. In 1870 we had a population of 1,321,000, and, as above stated, 1,684,600 in 1880, an increase of 363,600, or 27.50 per cent. Now, if we had increased in population at the same ratio during the decennium from 1880 to 1890 as we did from 1870 to 1880, we should have had a population of 2,148,000 in 1890, and at the same ratio of increase we should have next year 2,719,000.

Since the period from 1880 to the present there has been a great increase in business enterprises. Many factories have sprung up, and a great increase in mining operations, to say nothing of agricultural and commercial matters, all of which is greatly calculated to induce immigration to the State.

We have had no epidemic diseases to curtail the number of the people more than the ordinary diseases. Our greatest epidemic was the yellow fever of 1878, which was two years previous to the time we are alluding to, and occurred during the centennial period in which we had an increase of 27.50 per cent.

Now, the only inference we can draw from these calculations is that over 200,000 of our population were left out in taking the census of 1890. Had all of our population been tabulated, our death-rate would have been much lower than stated. Another material error was made in enumerating the colored population in 1890, which only gives 268,173, whereas the census of 1880 gives 329,000. The births among the colored folks that year were 7,504, of which number 514 died the same year. We are satisfied of the fact that the negro population did not decrease in numbers, but on the other hand greatly increased during

the ten years. It is to be hoped that the census to be taken next year will be more correct.

My main object in writing this paper is to again draw the attention of our profession and philanthropists to the fact that our great State has no census reports of her vital and mortuary statistics. We have the old law of 1874 still extant, slightly modified or improved, but it seems little attention is given it. I have seen no reports published. The law of 1874 is very good if it was observed by everybody concerned, but it is not sufficiently plenary in its provisions to induce due observance.

For ten years I reported births and deaths, complying with the law, handing the reports to the County Clerk, who was to forward them to the State Auditor to be embraced in his annual reports, but if any were ever published I am not aware of it. It was said that many of the reports were not forwarded, as the clerks received no remuneration for such work.

I think the reports of births and deaths should be made compulsory on the part of physicians and midwives, allowing them a certain fee for their trouble, but I apprehend but few physicians would receive a compensation for such work. Professional pride would be a sufficient inducement to comply with the law. All they would ask for would be blanks furnished them. I think the whole matter should be under the direction and control of the State Board of Health. The reports should be forwarded to the Secretary direct, and their publication supervised by him, and due compensation allowed him for his work.

Kentuckians are a proud people, and should not be satisfied to be in the rear of any other State. We stand high in every particular except knowledge pertaining to the character of our diseases causing death, and increase of population by the birth-rate. In every other respect we stand equal to any of our neighbors, and in some things ahead.

The old Bluegrass State ought to get a new move on herself and take as much interest in the affairs pertaining to the welfare of her population as she does in all departments of business affairs. Above every thing, our profession should not allow our standing and achievements in the past to become dimmed or tarnished by neglect of present duty. We are proud of our professional renown, being in this particular ahead of any other State. We should be stimulated by recalling to

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memory the names of Brashear, McDowell, Dudley, Drake, Gross, the Yandells, and many other noted medical men.

Louisville is the only city of the State where regular reports of births and deaths are made, the report of births being only a recently-enacted ordinance.

It is to be hoped that an effective law will be enacted by our next legislature by which we can have correct reports of our vital and mortuary statistic.

The report of the Health Officer for Louisville for last year is very favorable for the sanitary condition of the city. The population is estimated at 225,000, which is, no doubt, very nearly correct, the number of whites being 184,950 and the colored 40,050. The death-rate for the whole population was 13.59 per 1,000 inhabitants, the whites being 11.85 and the colored 21.62. This rate is a fraction lower than that of 1897, it being 14.40 for the whole population; white, 13.60 and colored 20.00.

I intended to give a prorated statement of vital and mortuary statistics of the State for last year from the census of 1890, but on account of the error on the part of the enumerators, such a report would be of little utility. I will state, however, what it is under the imperfect census of 1890. At the same ratio of increase as took place from 1880 to 1890 our gain would be 410,000, making the population for the year 1898 2,268,000.

MEADOW LAWN, KY.

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TWO CASES IN WHICH THE ORDINARY CLINICAL EVIDENCES AND MICROSCOPICAL EXAMINATION WERE MISLEADING.

BY M. F. COOMES, A. M., M. D.

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a Member of the American Medical Association and the Kentucky State Medical Society;
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of Medicine Hospital, and Consulting Ophthalmic Surgeon to
Sts. Mary and Elizabeth Hospital, Etc.*

The subject of the first case was Mr. Robertson, of ———, Ind., who consulted me in 1892 concerning a morbid growth on the surface of the right eyeball, at the margin of the cornea and the sclera on the temporal side. It was a harmless-looking growth, almost free from

color, apparently looking very much like a mass of pale white granulation tissue, having almost no red color, but slight pinkish hue.

At the time of his first visit I removed the growth clean down to the surface, thinking that it was of a simple nature. Within six months he returned, the growth having almost the identical appearance it had at the first visit. Again I removed it by cutting it away as before.

One year after the second operation he appeared again with the growth considerably larger than at the first visit. At this time it was subjected to microscopic examination and found to present the appearance of small round-celled sarcoma. This did not astonish me very much, at the same time the only clinical evidence that would lead me to believe the growth was of this nature was its prompt return each time after removal.

In January, 1896, after I had removed all that could be cut away with the knife, I seared the open surface with a cautery wire. Even this did not prevent its return.

In March, 1896, I made a cut sufficiently wide to include every particle of the growth, and removed every thing down to the sclera. All of the open surface was then curretted with a small, sharp instrument. The wound healed readily, and at this writing there is no evidence of any return. The vision in this eye has not been affected in the least, and the man's health is perfect. To the casual observer this growth would be considered unimportant, yet microscopically it appeared to be of the most malignant variety, but the final termination of the case proves that the microscopical test was of no value, and that the ordinary clinical appearance was most reliable.

The second case was in the person of a young man with a growth in his nose. I saw this case in 1896. The man was pale from the loss of blood, and the history of the case pointed very strongly to the growth being sarcoma. An attempt to remove the growth was followed by profuse hemorrhage, and the operation had to be abandoned for the time being. Portions of this growth were examined time and again in the two succeeding years, and each time all of the microscopical evidences of small round-celled sarcoma were present. The tumor was finally removed, and it has now been three years since I first saw the case, and the patient is well and bids fair to live out the ordinary span of life.

These two cases show very clearly that the time has not yet arrived when sarcoma can be determined by the microscope. In other words, there is no way of differentiating between granulation tissue and small round-celled sarcoma.

LOUISVILLE.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, July 14, 1899, William Cheatham, M. D., President, in the Chair.

Exhibition of X-ray Photographs. Dr. T. L. Butler: I have here a few X-ray pictures which may be of interest to the members of the Society, especially from the medico-legal aspect. Three weeks ago a doctor from Indiana brought a young lady to this city, and outlined to me the history of the case, which was about as follows: That she had received an injury to her elbow some time before, and had not gotten what she thought was a very good result. She could pronate and supinate pretty well, but there was only partial flexion and extension. The doctor in the case had diagnosed the injury as a dislocation associated with a fracture, which he claimed had been thoroughly reduced and properly treated. It seems that she ran across two or three rival doctors in that part of the country, and they told her that she had an unreduced dislocation of the radius forward. A distinct lump could be felt not over the radius, but midway between the radius and ulna. She told the doctor who had treated her that she intended suing him for damages, but he succeeded in getting her to come here to have some X-ray pictures taken before instituting suit. The first picture is taken with the arm in such position that the light comes from above downward; it shows both bones to be in perfect position, but an irregular mass can be seen; this is now bone, but it was at first callus. The picture shows something which is very unusual, viz., the old line of fracture; this is perfectly shown. There is no dislocation. I do not think there could have been any displacement at the time, because it would have been impossible to have gotten the fragments in such good apposition. The position is perfect, and you can see distinctly the line of fracture, also the lump of callus, now bone, which doubtless interferes materially with flexion and extension. This is evidently

what the doctors felt when they told her she had a dislocation of the radius forward. It is not that, as the two pictures before you demonstrate. It has now been two years since the accident; the pictures were taken four weeks ago, and I have since received a letter from the doctor, who stated that the idea of a damage suit has been abandoned. I am satisfied I saved the doctor a suit for malpractice by taking these photographs.

This is the second medico-legal elbow case I have had where I am satisfied I saved the doctors damage suits.

I show another X-ray picture of a hand which contains a piece of steel. It is simply shown to demonstrate how plainly the foreign body can be seen. The case contains no other features of especial interest.

Discussion. Dr. L. S. McMurtry: I have been very much interested in the work Dr. Butler has been doing, and have been more and more impressed with the utility of X-ray work in cases such as the doctor has reported. It seems to me it is going to have an extensive field of usefulness in a very admirable way, as he has illustrated in suits for malpractice.

Dr. A. M. Cartledge: Pathologically the case reported by Dr. Butler is of great interest, and the question arises just as to the nature of this bony enlargement near the head of the radius. Dr. Butler says that the radiograph shows that the joint is intact and all right, and I am inclined to look upon this enlargement as either originally a chipped piece of bone from the head of the radius which has become nourished, or a form of exostosis. It has been so long since the injury that it can hardly be callus.

This picture reminds me of a case that was seen some time ago of an ununited fracture of the radius at about the junction of the middle and lower third, where non-union was very evident; but there seemed to be a bridge of bone, which I took to be a splinter, that cast a shade in the picture. The fracture was sustained in January of the present year. We cut down upon it and wired the fragments together. The shadow cast over the radiograph proved to be a loose spicula of bone which was underneath and detached from the rest of the bone.

I agree with Dr. Butler in regard to the great value of the X-rays from a medico-legal standpoint. In fact, the last week has made me believe that all of us have to make use of the X-rays in fracture work. Briefly I will state that a gentleman came here last week who had

sustained an injury in Cincinnati; he had been thrown from a trolley car. His home was in Louisville. A surgeon in Cincinnati had put a splint upon his hand and arm, and he then came to this city. The hand and arm were greatly swollen and hurt him considerably. In taking off the dressing the man told me that he had a dislocation at the wrist of the ulna, and apparently it looked that way, but in feeling it I could elicit crepitus. We put his arm under the X-ray and had no difficulty in determining that he had a fracture of the lower end of the radius. I suppose the severing of the ligaments allowed the ulna to drop slightly, but there was not a dislocation of the ulna; there was a fracture of the radius which had been treated for a dislocation.

A day or two afterward we had an old lady with an injury to the elbow that I am satisfied any of us would have put up for a severe sprain. There was no crepitus, and it was exceedingly painful. Under the X-ray a fracture of both bones of the forearm below the elbow was shown.

The next day I had a gentleman with a fracture of the humerus at the junction of the middle and upper third. I put this up myself, having an assistant make extension, with the usual form of splint. He was comfortable as most such fracture cases are. He came in the office the following day, and we put him under the X-rays, and found there was a lapping of the ends of the bone of fully an inch. I took off the dressing, and with extension thoroughly replaced the bones and reapplied the dressing. A day or two afterward he was again subjected to the X-rays, and there seemed to be good apposition of the bones.

I mention these cases to show that eventually it will be necessary for all of us to have this X-ray apparatus. We know that in oblique and many transverse fractures most excellent results have been obtained, even where the bones have not been properly adjusted. It is seldom that an oblique fracture can be gotten and maintained in perfect apposition. The question is, what position is the court going to take in this matter in case of a suit for malpractice? We know that surgeons throughout all ages have been getting good results even with lapping of the fractured ends of bones. Since the X-rays have been established, if we find two months afterward that there is lapping, what is going to be the medico-legal deduction? Probably the time will come shortly when we shall all have to use the X-ray apparatus to see that we have the fracture properly adjusted.

I am glad that Dr. Butler brought up the subject for discussion.

Dr. T. S. Bullock: I am very much interested in this work, and have seen a good many of the pictures Dr. Butler has exhibited. I am convinced that what the gentlemen have said about the utility of the X-rays is true. The greatest advance made in the taking of these pictures is the curtailment of the time of exposure, and I believe that we will in future hear no complaints from the effects of burns, etc., from prolonged exposure. It seems to me, however, in regard to the point mentioned by Dr. Cartledge, if there were very much overlapping of the fragments we would be able to tell it without resorting to an X-ray picture. What we are all after is as near a perfect result as possible, but in a large majority of the cases cited by Dr. Cartledge the result would be so good that the patient would not know any thing about it.

Dr. L. S. McMurtry: I would like to mention an illustration of the practical value of the X-rays in a case shown me by Dr. Keen three weeks ago in Philadelphia. It was a skiagraph of the kidney where he had made a nephrotomy for stone. It was very apparent from the skiagraph that there was another stone about one and a quarter inches below the first one. The operation would have been incomplete but for the X-ray picture. If he had removed one stone, which was the larger one, and discontinued the operation, it would have failed of relief, whereas the X-ray enabled him to complete the operation by removing both stones.

Gall-Stones. Dr. A. M. Cartledge: The specimens I present are of especial interest only as regards the clinical history of the patient and the difficulties we had to overcome in the operation. The specimens are two large gall-stones removed from the same patient. I almost feel like asking the indulgence of the Society in reporting gall-stone cases, since they have become so common, and I only do so as the case presents some special features.

The patient from whom these gall-stones were removed was a man sixty-four years of age with a long history of trouble in the region of the liver, and many attacks of what was probably gall-stone colic, so-called, the inception of his trouble dating about four and a half years ago, at which time, after severe pain, he was seized with jaundice. He has been continually in jaundice ever since. He suffered great pain in the hepatic region with recurring attacks of fever, characterized by septic symptoms, nausea, etc., which usually kept him in bed from ten

to twelve days. These symptoms occurred more frequently and became more exhausting; meantime, during the long cholemia, he developed hemorrhages from chronic jaundice. He had hemorrhages from the bladder, one of which looked as if it was going to prove fatal a year ago. He also had a low-grade of kidney hemorrhage, and later, within the past few months, has shown well-marked renal changes by way of tube-casts of various kinds. About a year and a half ago it was discovered that he also had a heart lesion—a valvular heart lesion—which was by some experienced physicians supposed to be the result of circulation in the blood of toxins due to the profound cholemic state, an endocarditis with deposits about the valves. The anemia was characteristic and progressive; the man was as jaundiced as it is possible for a person to be. A year ago last summer, at the advice of his physician, Dr. Koehler, who diagnosed gall-stones, he visited Germany to consult Professor Leyden for diagnostic purposes. After examining him carefully, Professor Leyden told him he thought his trouble was calculus impaction—stone in the common duct—that he would not advise him to be operated upon in view of the condition of his heart, kidneys, and the anemia, but it was thought best that he should be carried along under medical treatment until the end should come. This gentleman consulted some of the first physicians of Germany and America, and, although history from the inception of the trouble was what would be considered by nearly every surgeon a clear history of calculus disease, yet it was repeatedly diagnosticated other things. I do not mean to underestimate the importance of inflammatory conditions of the ducts of the liver, etc., such things as I have rarely seen exist except from mechanical causes, yet such things were repeatedly diagnosed in this case and kept the man from being operated upon. He was repeatedly advised not to have an operation performed. Multiple abscess of the liver was diagnosed, with chronic inflammation of the gall-passages, with thickening ulceration and profound jaundice.

The question arose, considering the extreme condition of the patient, what could be done for his relief in an operative way? When I first saw him I felt that he was a pathological museum, and we could scarcely hope to get him through an operation so grave as invading the common duct and bring him off the table alive. To begin with, he had a serious heart lesion; his kidney secretion averaged only about eighteen ounces in the twenty-four hours, and it was loaded with albumen and casts. After studying the case thoroughly from all the different aspects, I felt

satisfied as to the nature of the trouble, and also felt that an attempt should be made to relieve the man by surgical means; in other words, that he should not be left to die with the stones in him. Dr. Senn, of Chicago, saw the patient, as did also Dr. McMurtry and others of this city, all of whom concurred in the opinion to operate.

In this connection I want to speak of the great benefit that we derived from the use of saline infusion and saline injections in preparing this man to withstand the ordeal of the operation. By the use of half a gallon of saline solution twice a day the secretion of the kidney was brought up from twenty-two to fifty or sixty ounces during the twenty-four hours, arterial tension was raised, and altogether the man was rendered a very much more favorable surgical subject. In discussing the question of the anesthetic, we finally selected what I believe to be the lesser of the two evils under such conditions, viz., chloroform, and I will say that the man took it nicely. The operation consumed about one hour. The larger stone I show you, which has scaled off very much, was impacted tightly in the common duct. The gall-bladder, as I had suspected, was reduced to the size of this stone. It was very deeply situated and high; I take it that it was at least seven inches from the external incision up to where the contracted gall-bladder was found, and because of the long-continued inflammatory process it had been drawn over toward the median line. The contracted gall-bladder was over this large stone, and the second stone was impacted in the common duct near by. The cystic duct was entirely obliterated. One incision was made over both ducts and the stones removed. The common duct was very much shortened, the duodenal attachment being very near the stone. An effort to suture the duct was not made except in this manner: Two tubes were passed into the common duct, gauze was packed around these, and then four guy-rope sutures were attached to the dilated pouch so as to draw this as near the parietal peritoneum as possible. They were brought within three inches of the anterior parietal peritoneum, and then a protection of gauze was built around these tubes and the abdominal wound closed up to that point. Bile discharged freely at once, there was no shock, and the patient got along nicely. Bile commenced to flow through the intestine in four days, showing that the distal portion of the duct was open. The external fistula closed rapidly; probably in three weeks all bile was going by the natural channel, and the jaundice is slowly clearing up. The operation was performed about the middle of last

March. Since that time there has been some edema of the legs from the heart trouble. This has about cleared up, and it looks as if his life would be prolonged for a great while by the operation. The kidney has greatly improved.

Discussion. Dr. L. S. McMurtry: I want to speak of one or two points that Dr. Cartledge did not mention in detail, which I am sure will be of interest. This case, as the doctor stated, was one with a great many interesting features. I am sure it will be so regarded by the Society. First, as has already been stated, I saw the patient a week before the operation was performed, and there could have been no doubt as to the nature of the trouble. The indications of gall-stone impaction in the common duct were beyond question, and the difficulties that were presented in regard to the operation itself were of the most serious character. The outcome of the case is certainly excellent. One lesson that it teaches is that radical surgery can be successfully done in a class of cases that we have hitherto regarded beyond the scope of surgical interference. Here is a man with cholemia of the most pronounced character that has been going on for a great length of time; he had kidney lesions, he had heart lesions, yet he was operated upon with a good result. He bore the anesthetic well. The operation was an exceedingly difficult one; the gall-bladder was practically gone; it was contracted down to the size of the stones it had contained.

Dr. W. O. Roberts: I would like to ask Dr. Cartledge how he built around the gall-bladder to keep the peritoneum free?

Dr. A. M. Cartledge: I made a gauze bridging around the tubes; I have done this in several cases operated upon for gall-stones in the common duct.

Dr. T. S. Bullock: I only wish to state that two or three years before the operation I examined this man for life insurance and discovered the heart lesion at that time. His urine had a specific gravity of 1.030-2, and there was quite a large amount of sugar. He was rejected on this account.

Dr. William Bailey: If I had my hat on, I should certainly take it off to the surgeon in this case. Notwithstanding the complications, the handicapping was so great, so decided, I think the courage of his convictions was good, to enable him to undertake an operation of this kind under the circumstances related. I want to bear testimony to the fact that I believe Dr. Cartledge is very much indebted to the normal

salt solution in preparing his patient for this work, and I want to say moreover that I think it ought to be used much more as a medical measure than it has been hitherto, and believe it will take a much more prominent place in a large line of troubles in the future. I do not believe this man could have had such good preparation for the operation by any other means known to us.

The essay of the evening, "Placenta Previa," was read by Thomas H. Baker, M. D. [See p. 241.]

Discussion. Dr. T. S. Bullock: I was very much struck with two features in Dr. Baker's too brief paper: First, the fact that two out of his five cases of placenta previa occurred in primipara; this is out of the ordinary. Second, a point which has been observed before is the recurrence of previa in the same individual. It seems that multiparity is a very important factor in these cases, and there is little liability of recurrence in the same patient.

In regard to the treatment of these cases, I was especially interested in a report I saw some time ago made by Jardine in the Transactions of the Glasgow Obstetrical and Gynecological Society. He reports fifty-one cases; of this number, twelve were complete, and of these he was able to save ten of the mothers and eight of the children. His mode of treatment is somewhat different from that outlined by Dr. Baker and that which has been generally practiced in former years. In the fifty-one cases the tampon was used only nine times. He states that the treatment which gives the best results is not to await the slow process of dilatation by means of the tampon, but to at once anesthetize the patient and mechanically dilate the cervix, and do a version at the same sitting. The indications for treatment he gives are first to empty the uterus, control the hemorrhage, and, as has been spoken of by Dr. Bailey in discussing another class of cases, the third indication is to brace up the patient from the loss of blood by the injection of normal saline solution. Of these fifty-one cases, in forty-three there was a vertex presentation. In thirty-six of these version was done, in four forceps were used, and in three the bipolar method of version was employed. Only six were primipara, and two had had previa in earlier confinements.

Hirst, in his recent work, reports one hundred and four cases of placenta previa which occurred in the practice of Lomer, Hofmeier,

Behm, and himself. In these the maternal mortality was only one out of the hundred and four (Hofmeier, who had thirty-seven cases), which he regarded as an extremely fortunate occurrence. The fetal mortality was about forty per cent, and he states that we may expect a fetal mortality of at least fifty per cent. The same method of treatment is outlined by Hirst as advocated by the other author mentioned, viz., mechanical dilatation of the cervix and rapid emptying of the uterus. He, however, does not allude to the extremely important factor in the treatment of these cases, that is, the introduction of saline solution to supply the enormous loss of blood.

I do not believe it is proper under these circumstances to spend very much time in disinfection of the vagina. I believe that this thing has been very much overdone, and recent reports on the subject of the vaginal douche and vaginal asepsis and antisepsis show that the vagina is normally sterile. Quite an exhaustive report has been made by Dr. J. W. Williams in which this matter is thoroughly gone over, and I do not believe we ought to do any ante-partum or post-partum douching of the vagina unless there are some strong indications therefor. Of course a strong indication for the ante-partum vaginal douche is the existence of gonorrhea. In giving the ante-partum douche under these circumstances we may avoid ophthalmia neonatorum in the infant, but unless there is some direct indication we should spend no time in disinfecting the vagina. If we will probably disinfect our hands, arms, etc., we will fulfill all the indications.

Dr. William Bailey: I am very much pleased with the paper read by Dr. Baker. In regard to treatment, I think a great deal depends upon the individual case and the facility with which the operator will perform the different obstetrical operations. For myself, I believe it would be better for me to neglect every thing else and secure dilatation of the cervix and deliver by version. If the foot is brought down, it will serve the purpose of a tampon until the delivery can be accomplished.

I do not believe the time will ever come when we will have absence of mortality for both mother and child, and I further believe that oftentimes the child is lost by the excessive hemorrhage before any obstetrical operation has been performed, before even dilatation has been completed. And I want also to emphasize what Dr. Bullock has mentioned, that we have in the normal salt solution perhaps a means of preventing the loss of life to the mother, and possibly to the child.

Another thing in this connection, I believe it is admitted that these cases are more liable to septic troubles than almost any other condition in labor. The woman with a placenta previa, with great loss of blood, has rather an increased liability to septic infection, whether it is from the manipulations necessary in her delivery, or whether it is the anxiety or hungriness of the absorbents by the loss of blood; possibly the absorption is more marked, the absorbents are more anxious, and absorption of morbid material is more certain to take place; then it occurs to me if that is true, the use of the normal salt solution would supply to the blood-vessels an abundance of fluid substitute, and in this way perhaps there is less disposition on part of the absorbents to take up the poisonous material.

Dr. T. S. Bullock: In regard to the last point mentioned by Dr. Bailey, I have seen lately several reports of puerperal sepsis having been cured alone by the introduction of the normal saline solution.

Dr. L. S. McMurtry: I have nothing to say on the subject except to congratulate the essayist upon his paper. His experience has been an unusually large one; I think you will find very few gentlemen in the room who have seen five cases of placenta previa.

Dr. J. G. Cecil: I am glad that Dr. Baker selected this subject for his paper, and, like Dr. McMurtry, I think his experience has been rather unusual. Certainly it does not fall to the lot of many of us to see as many as five cases of placenta previa. I have in mind now one case of central implantation in a primipara which has always given me a very bad impression of placenta previa. I have seen several cases of marginal implantation in which there was no difficulty except unusual loss of blood, with salvation to both mother and child in prompt delivery. The one case referred to I would like to report briefly, and in doing so outline the treatment which was adopted at that time; and, although the result was fatal to both mother and child in the end, it appealed to me at the time as being an ideal treatment for placenta previa under circumstances similar to that, and I should be disposed to adopt it again under like circumstances. This case was in the person of a young woman, probably twenty-four years of age, a primipara—a rather fleshy, well developed woman. The implantation was central. I was called to see her in consultation with Dr. Graham, of Jeffersonville, Ind. As soon as I reached the patient and made up my mind as to what we had to deal with, I told Dr. Graham that I thought the case was exceedingly dangerous to the child and to the mother, and that we

had better get all and the best assistance we possibly could; and at his suggestion, in which I heartily concurred, Dr. Turner Anderson, of this city, was called. Hemorrhage had been very great. The mother, however, being robust, had stood the loss of a large quantity of blood very well. After Dr. Anderson came in consultation we agreed that the best thing to do was to separate the placenta as far as it could be reached, and then all of us remain with the case, which we did, by simply sitting down and watching it. Separation of the lower portion of the placenta from the neck of the uterus that was within reach of the finger stopped the hemorrhage completely, but up to this time dilatation was not sufficient to proceed with any thing like operative procedures; neither did we attempt forcible dilatation. After waiting some hours, dilatation proceeding slowly, we were able to introduce the finger up to one side—the side which seemed to offer the least resistance—and break through the placenta on that side, and evacuated the liquor amnii; this brought the head down low well into the pelvic cavity, of course filling up the cervical cavity very well, acted as a tampon, and we still waited. The woman was turned crosswise of the bed with a clean sheet underneath her, and one of us sat by the bed all the time watching for hemorrhage and waiting for the pains that we expected to come on. After sufficient dilatation had taken place, Dr. Anderson, with his unusual skill in obstetrical operations, succeeded in applying the forceps. Then, of course, we had complete control of the case. With the forceps on and the head well down there was no further risk; neither did there occur any hemorrhage subsequently. The child was delivered alive, but died shortly, probably from loss of blood previous to the delivery. The placenta was delivered after the birth of the child without any difficulty. The woman did very well for some days, and then developed infarctions of the lung. She got through this after a few days' extreme illness and bid fair to recover, when the same condition apparently developed in the brain, and this ended her life.

It was a very sad case, and one in which I was extremely interested, from the complications, from the situation of the placenta, and from the final outcome of the case. It seems to be that the prognosis in all cases of placenta previa will vary very much, according to whether the patient is a primipara or not. In multiparous women we have a much better chance for both mother and child than we do in primipara. The plan adopted in this case seemed to me to be a good one, and ought to have been followed by better success than we had at that time.

I also think well of the plan outlined by Dr. Bullock, of rapid dilatation. Very much can be done with this practice, especially in multiparous women. Dilatation of the cervix can be done very rapidly with little danger. I believe further that the suggestion of injection of saline solution is of a great deal of value. It ought not to be neglected; it ought to be impressed upon the general practitioner, especially the obstetrician; and it certainly ought to have a large field of usefulness, and thereby cause salvation of a great many lives.

Dr. F. C. Wilson: There is only one point that I would like to refer to, and that is the possibility of accounting for the occurrence of placenta previa in connection with the time of conception. In tracing the ovum down from the ovary through the fallopian tube to the uterus and out through the vagina, it is estimated that it takes a certain time to reach the os—perhaps, on an average, about ten days—and then if not impregnated it passes out and is lost. Now, we know that one method of preventing conception practiced among married women is to avoid coitus for ten days after cessation of the menstrual flow, with the idea that the ovum will by that time have passed out. Suppose that coitus takes place during the latter part of this period, could that have any bearing upon the occurrence of placenta previa? Of course, the lower the ovum has passed in the uterus at the time it meets the male elements and becomes impregnated, the more likely it will be to attach itself at once at that point upon the surface of the uterus, and the later the period the lower the point of attachment will take place. It seems to me it must bear some relation to the occurrence of these cases. Statistics might be gathered which would throw some light upon the question, and I thought this might be an interesting point in the discussion.

Dr. T. S. Bullock: In regard to the etiology of placenta previa, I think cancer, fibromata, and the various forms of endometrial inflammation play quite an important part. I hardly think the site of impregnation, which we know occurs most frequently in the fallopian tube, has much bearing upon the subject, because we know that as soon as the ovum falls into the uterus, in those cases where impregnation has taken place in the normal way, the ovum is caught in one of the crypts of the mucous membrane (*decidua vera*), and the *decidua reflexa* rapidly envelops it. If any thing has interfered with the development of the *decidua vera* near the orifice of the tube, the ovum might drop further down in the cavity of the uterus, and a lower implantation of the pla-

centa would result. There are also some anatomical reasons to account for it; where the fallopian tube enters low down upon the uterine wall, for instance. I can hardly see how the time at which conception takes place has any thing to do with the question.

Dr. F. C. Wilson: The only statistics I can present are two cases. In these two cases there was placenta previa, and inquiry developed the fact that in each case conception had occurred nine or ten days after cessation of the catamenia. There was no question as to the time of impregnation in these two cases, as coitus had not been practiced until nine or ten days after the period had ceased.

THOMAS L. BUTLER, M. D., *Secretary.*

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foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The End of the Holidays; A Dangerous Trade; Increase of Lady Doctors; The Inebriates' Act; A Royal Visit; Army Nurses; The Medical Supervision of Elementary Schools; The Institute of Preventive Medicine; Our Milk Supply.

The leaders of the medical profession are rapidly returning to town from their summer holidays, ready for the opening of the various medical schools in October. There promises to be a smaller entry of fresh students than usual.

The final report of the Departmental Committee appointed to inquire into certain miscellaneous dangerous trades has just been published. One of the most curious subjects they investigated was label-licking, which appears to be extensively resorted to in thread mills and aerated water factories. From a minute drawn up by Dr. Oliver, he shows from a medical point of view it is most prejudicial to health, his analyses of the labels showing that they frequently contain copper and lead. The report goes on to say that at one of the large thread mills in Lancashire the tickets for the bobbins were at the first visit of the committee almost entirely moistened by application to the mouth. There were employed at that time some twelve full timers, who licked from forty to fifty gross of labels per day each, and thirty-five half timers, who accomplished from twenty to twenty-five gross per day. To give an indication of the amount of licking possible, Dr. Oliver

discovered one woman who could complete forty-five gross of bobbins a day, or allowing a ticket for each end of the bobbin, ninety gross of labels a day. Most firms since the inquiry have the whole of this work now done more expeditiously and better by artificial methods than by the mouth.

Medical women are increasing in Great Britain. There are eighty-five of them in London at the present moment registered and qualified, the greater number of them actively engaged in practice. Some hold posts in dispensaries, hospitals, children's hospitals, infirmaries, ophthalmic institutions, as anesthetists, medical examiners, and lecturers. Nearly every large provincial town is provided with a lady medical, one having penetrated so far northward as the Orkney Islands. There does not appear up to the present to have been objection to the lady doctors' presence by the male practitioner, but a loud outcry is being made in connection with the midwife business; the semi-qualified woman is alleged to interfere with the proper province of the medical man.

The Inebriates' Act which was passed last year is reported to be working with success. The act gave magistrates power to commit to a reformatory any confirmed drunkard who had been repeatedly convicted of drunkenness. The government inspector calls particular attention to what he seems to consider a model retreat, that is, the Royal Victoria Home, Bristol, the inmates of which work in the garden or do any other work that is found to be suitable for them. They are supplied with daily papers and periodicals, and after a time they are removed to small cottages near the main building, where it is hoped to form a sort of model village, in which the ordinary life of an English village without intemperance will prevail. This retreat had over five hundred inmates last year, and it is stated that in only ninety cases could drunkenness be traced as hereditary. The staff of the institution have come to think that a man is no more likely to be a drunkard because his father was, than he is to have a wooden leg because his father had one.

November 15th has been definitely fixed by the Queen as the date of her visit to Bristol to open the Royal Jubilee Convalescent Home. The institution has been erected and endowed at a cost of nearly £100,000, raised by public subscription in celebration of the Diamond Jubilee.

A detachment of army nurses have been sent to South Africa. It is necessary for each nurse, after going through a general training of at least three years in a recognized London or Provincial hospital, to be entered for six months on probation at the military hospital at Neeley; when this period is successfully fulfilled, the nurse becomes an army nursing sister available for duty wherever the requirements of the Service may call her. The age clause for pension comes into effect at sixty. For war service the nursing staff is attached to the base hospitals. All told there are eighty nursing sisters. The uniform is grey serge, with a little red shoulder cape and plain white linen cap. A man of the Royal Medical Corps is always told

off to wait on the sisters. Sisters' pay begins at £30 and rises to £50, and as every thing is provided, including uniform, there are no war allowances; but as officers they share in any prize money at the end of hostilities and receive any medal which may be issued. It has always been an essential qualification for admission to the army nursing service that its members should not only be ladies, but possessed of those indescribable attributes that should commend them socially and in their work.

The annual Harveian oration at the Royal College of Physicians, which was first given in 1656, will this year be delivered on October 18th by Dr. G. Vivian Poore.

Dr. D. Lea read a paper at the Public Health Congress on the advantages of the medical inspection of children in elementary schools. He referred to the very complete system of medical inspection which was carried on in several of the large towns in America. Dr. Lea considered that the expense of introducing the system here would be more than counterbalanced in the early detection of disease and an improvement in the general health of the children.

The Jenner Institute of Preventive Medicine has obtained permission to alter the memorandum of association in order to comply with the conditions of a gift of £250,000 from Lord Iveagh. The original object of the institute was to promote the study and treatment of infectious diseases. Lord Iveagh wished to include other objects and to have the institute controlled by seven persons, one being appointed by the Royal Society, three by the institute, and three by Lord Iveagh or his successors.

Dr. Anningson, of Cambridge, considers that there is a disadvantage in too strong an insistence on the practice of "pasteurization," inasmuch as it throws on the consumer the duty of protecting himself, and thereby in a measure relieved the producer and purveyor of the moral obligation, at any rate of safeguarding the purity of the milk supplied. In reference to animals the remedies he suggests among others is that disease should be eradicated by breeding it out, that cows suffering from advanced disease should be slaughtered at once, that calves should be tested when two or three months old with tuberculin, that animals should be tested before being allowed to mix with others, and that healthy stock should be retested twice during each year.

LONDON, September, 1899.

FOR PERIODIC NEURALGIA.—

R Quininæ valerianat., ... gr. xlv;
 Extr. juniperi, ... q. s.
 M. Ft. pil. No. xxx. Sig. Five to ten pills a day.—*Bouchardat*.

FOR URICACEDEMIA.—

R Lithii citratis, ... gr. viii;
 Ac. citrici, ... gr. iss;
 Oleosacchar. citrici, ... gr. iv.

M. To make one compressed pastille. Sig. One dissolved in water three times a day.—*Peters*.

Reviews and Bibliography.

A Manual of Diseases of the Nervous System. BY Sir W. R. GOWERS, M. D., F. R. C. P., F. R. S., Consulting Physician to University College Hospital; Physician to the National Hospital for the Paralyzed and Epileptic, Queen Square. Third edition. Revised and enlarged. Edited by Sir W. R. GOWERS and JAMES TAYLOR, M. A., M. D., F. R. C. P., Senior Assistant Physician to the National Hospital for the Paralyzed and Epileptic, Queen Square; Physician to the North-eastern Hospital for Children and to the National Orthopedic Hospital. Volume I, Diseases of the Nerves and Spinal Cord. With one hundred and ninety-two illustrations. Octavo. Price, \$4.00, net. Philadelphia: P. Blakiston's Son & Co.

In 1886 the first edition of Dr. Gowers' work was given to the profession, with the modest preface that the volume contained the first part of an attempt to give an account of diseases of the nervous system sufficiently concise to be within the compass of the time-pressed student or busy practitioner, and yet adequate in its outline of a subject which had become wide and deep beyond any other part of medicine. Since then a world of work has been done in connection with diseases of the nervous system, and numerous authors have entered the field, but in its successive editions Gowers has held easily the lead. It is easy at any given date to gather all the known facts and present them to the public in a well-printed and well-bound book. But it not easy to find an author or an editor so discriminating in his judgment of phenomena, so rich in expression, so apt in description, so accurate in the use of words as the gifted author of these volumes. Gowers is one of the few classical authors in medicine whose work is both a literary and scientific model. The reader feels that the author has a distinct grasp of his subject, and that he is capable of presenting it in such a way as that the student must grasp it likewise.

The association of Dr. Taylor in the work, while an appropriate one and doubtless rendered necessary by the magnitude of the task of complete revision, may be expected to add more to its scientific than its literary excellence. We are liable to become partial to books as to people, and to estimate them above their worth, but if the judgment of the reviewer does not err, the book on nervous diseases that is to be preferred before this has yet to be written.

D. T. S.

A Compend of Diseases of the Eye and Refraction, Including Treatment and Surgery. By GEORGE M. GOULD, A. M., M. D., formerly Ophthalmologist to the Philadelphia Hospital, etc., and WALTER L. PYLE, A. M., M. D., Assistant Surgeon to the Will's Eye Hospital, Philadelphia, etc. Quiz Compend No. 8. Second edition. Revised and enlarged. One hundred and nine illustrations, several of which are in colors. 295 pp. Price, 80 cents. Philadelphia: P. Blakiston's Son & Co. 1899.

A large edition of this compend having been sold within two years, the authors have corrected, revised, and enlarged the text as much as is com-

patible with the limited space, until now the volume far exceeds the ordinary size and scope of a compend. The section on Local Ocular Therapeutics has been increased to include all the recent mydriatics, miotics, local anesthetics, and ocular antiseptics.

It is a fortunate circumstance for any one when his name alone comes to be regarded as a guarantee of the highest excellence, and this is what is illustrated in this little book. The fact that George M. Gould is associated in its production and has passed upon it is of itself a guarantee of excellence that excuses review. It is full as to matter, clear as to presentation, and thorough in the treatment of the subject, the authors having put lexicon-making experience to use in order to make their subject as plain as possible and with the fewest words.

D. T. S.

Quiz-Compend No. 7. A Compend of Gynecology. By WILLIAM H. WELLS, M. D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic, etc. With illustrations. 279 pp. Price, 80 cents. Philadelphia: P. Blakiston's Son & Co. 1899.

In this the second edition of Dr. Wells' book a considerable number of changes have been made, particularly in the field of operative gynecology, these being rendered necessary by the rapid advance in this branch of surgery.

Several recent methods of diagnosis and treatment have either been added or substituted for those in vogue when the first edition was printed. The subject is treated in a concise and yet very clear manner, nothing of marked value being left out. The illustrations are full and well chosen, and in every way the book sustains the character of uniform excellence established for Blakiston's Son & Company's Quiz-Compend. D. T. S.

Over 1,000 Prescriptions or Favorite Formulae of Various Authors and Practicing Physicians. The whole being carefully indexed and including most of the newer remedies. Cloth. 300 pp. Price, \$1.00. The Illustrated Journal Co., Publishers, Detroit, Mich.

In the drama of a doctor's life there is probably no feature that undergoes so complete a metamorphosis as the regard in which he holds formulæ for prescriptions. At first they begin to be unfolded to him as a mine of wisdom in which he begins to delve almost hopelessly. How can he ever hope to master so much knowledge? He writes and copies and preserves, and then tries, and with broadening light he finds his awe was misplaced, his study largely wasted, and he begins to wonder by what fool the half of them was written, or how they ever came to be preserved. Indeed, not a few who have experienced the usual share of disappointments come to wonder why some one has not invented a doctor constructed on the principle of the slot-machine, which will respond to a moderate fee with a prescription. If four fifths of medicaments in the dispensary were eliminated and young physicians were taught to memorize the dosage and uses of the others as they would the tables in arithmetic, there would be little need of memorizing or copying even good prescriptions.

This book, however, to such as need such help, is about as good as any, and better than bigger ones. It is nicely gotten up with attractive binding and interleaved, so that the owner can add something of his own production in case of need.

D. T. S.

Enlargement of the Prostate: Its Treatment and Radical Cure. By C. MANSELL MOULLIN, M. D. (Oxon.), F. R. C. S., Surgeon and Lecturer on Surgery at the London Hospital; Examiner in Surgery in the University of Oxford; Hunterian Professor at the Royal College of Surgeons. Second edition. 205 pp. Price, \$1.75. London: H. K. Lewis. Philadelphia: P. Blakiston's Son & Co. 1899.

The publication of the first edition of Moullin's *Enlargement of the Prostate* marked a new era in the treatment of the diseases of that organ. It took its position at once as a classic. In this edition many of the operations upon the prostate described in the first one have been omitted as chiefly of historic interest.

The author now expresses himself convinced that there is no case of enlargement in which perfect relief can not be obtained, provided only the secondary consequences which so often and so entirely unnecessarily follow it, and which are due in the vast majority of cases to the careless use of catheters, have not been allowed to work irreparable harm upon the walls of the bladder. The work is exhaustive as to the development, structure, and function of the prostate, and the nature and treatment of its diseases, and even to the non-surgeon is extremely interesting reading.

D. T. S.

Surgical Nursing. A Compilation of the Lectures upon Abdominal Surgery, Gynecology, and General Surgical Conditions and Procedures, Delivered to the Classes in the Training School for Nurses Connected with the Woman's Hospital of Philadelphia. By ANNA M. FULLERTON, M. D., Clinical Professor of Gynecology in the Woman's Medical College of Pennsylvania; Obstetrician, Gynecologist, and Surgeon to the Woman's Hospital of Philadelphia. Third edition. Revised and enlarged. With illustrations. 294 pp. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

This work formerly appeared under the title, "Nursing in Abdominal Surgery and Diseases of Women." In the revised edition the author includes also a consideration of nursing requirements in general surgery, and has therefore changed the title.

As befits such a work, particular stress and much space are given to whatever relates to asepsis. A dietary for the sick is appended, and, taken altogether, a helpful guide is supplied to those whose calling is in the field with which it is concerned.

D. T. S.

A Text-Book on the Diseases of the Nose and Throat. By D. BRADEN KYLE, M. D., Clinical Professor of Laryngology and Rhinology, Jefferson Medical College; Consulting Laryngologist and Otologist, St. Agnes Hospital, etc. With one hundred and seventy-five illustrations, twenty-three of them in colors. 646 pp. Price, cloth, \$4.00; sheep, \$5.00. Philadelphia: W. B. Saunders. 1899.

It is to the credit of this work that no large claims of originality are made by the author, his avowed aim being to present to the reader the sub-

ject of the diseases of the nose and throat in as concise a manner as possible. The aim has been to make each chapter complete in itself, so that the reader, on turning to a given subject, may find under that heading all the matter desired; at the same time, since the work has been written for students and general practitioners as well as specialists, a special fullness and even apparent repetition characterize certain parts.

The illustrations are marked by the excellence that characterizes all the work of the enterprising publishers, a task made easy by the recent great advances in color printing.

D. T. S.

Materia Medica, Therapeutics, Medical Pharmacy, Prescription-Writing, and Medical Latin. A Manual for Students and Practitioners. By WILLIAM SCHLEIF, Ph. G., M. D., Instructor in Pharmacy in the University of Pennsylvania. One of Lea's Series of Pocket Text-Books. Edited by BERN B. GALLAUDET, M. D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, New York, etc. 352 pp. Price, \$1.50. Philadelphia and New York: Lea Brothers & Co. 1899.

In a work of the scope of this nothing more can be expected than a succinct and condensed statement of the best ascertained knowledge of the action and uses of medicines.

This volume supplies such a work of reference and text-book comprehensive and at the same time condensed, and also embracing such related subjects as may be included with obvious advantage. In addition to the paragraphs covering the physical properties, physiological action, therapeutics, and toxicology of each medicinal agent, chapters are added on prescription-writing, medical Latin, medical pharmacy, and practical anesthesia. Tables of doses, of poisons and antidotes, and of incompatibles, and a therapeutic index of diseases and remedies conclude the volume.

The binding and letter-press are attractive, and on the whole the authors have succeeded in producing a useful and convenient book.

D. T. S.

A Treatise on Human Physiology. For the Use of Students and Practitioners of Medicine. By HENRY C. CHAPMAN, M. D., Professor of Institutes of Medicine and Medical Jurisprudence in Jefferson Medical College, Philadelphia; Chairman Board of Curators, Academy of Natural Sciences of Philadelphia; Member of the College of Physicians, of the Zoological Society, Philadelphia; of the American Philosophical Society and the American Physiological Society. Second edition. Philadelphia: Lea Brothers & Co. Price, in leather, \$6.50; in cloth, \$5.50.

This is the second edition of Professor Chapman's most excellent work on physiology. The book remains much the same as the first edition, with the exception of the changes in the chapters on the nervous system and physiological chemistry, which were necessitated by the rapid advances in our knowledge on these two important subjects. It is one of the very best books of its class, and is written in a most charming style, that makes it a great pleasure to read. It contains no superfluous matter, and its chief points are forcibly and plainly stated, making it an excellent book or the

student. It is one of the very best books for the practitioner to buy, as there is much detail in it that he will need that is not found in many of the recent works on physiology.

A Manual of Diseases of the Nose and Throat. By CORNELIUS GODFREY COAKLEY, A. M., M. D., Clinical Professor of Laryngology in the University and Bellevue Hospital Medical College, New York City; Laryngologist to the Columbus Hospital, the University and Bellevue Hospital Medical College Clinic, and the Demilt Dispensary; Member of the New York Academy of Medicine, Society of the Alumni of Bellevue Hospital, Medical Society of the County of New York, etc. New York and Philadelphia: Lea Brothers & Co. 1899.

This is a neat volume of five hundred and thirty-six pages recently issued by Lea Brothers & Co. It is really a work of art as well as of science. The engravings and other illustrations are among the best that we have seen in recent years. The subject-matter of the work is admirably arranged, and it has an excellent index, which is always an important thing in any book.

This work is intended for practitioners and students of medicine, and is one of the very best that it has been our good fortune to see. The style is plain, terse, and altogether the book is a very readable one. We commend it to our readers, feeling sure that they will not be disappointed in it.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; Laureate of the Royal Academy of Medicine in Belgium, of the Medical Society of London; Corresponding Member of the Sociedad Espanola de Hygiene of Madrid; Member of the Association of American Physicians, etc. Volume III, September, 1899, Diseases of the Thorax and Its Viscera, including the Heart, Lungs, and Blood-vessels; Diseases of the Skin, Diseases of the Nervous System, and Obstetrics. Philadelphia: Lea Brothers & Co., Publishers.

This book is one of a series edited by Dr. Hare, and is well written and thoroughly up-to-date. There is no excessive verbiage to tire the reader. It is a presentation of new clinical facts in the most practical manner possible. It gives a clear and concise idea of what the masters deal with, for after all every practitioner who establishes any fact in medicine or surgery becomes a master to that degree of that particular subject. It is facts that are needed, and particularly with practitioners and surgeons, whose time will not permit of elaborate reading, and this series of books will enable them to cover the entire field without excessive labor. They can be read by all with profit.

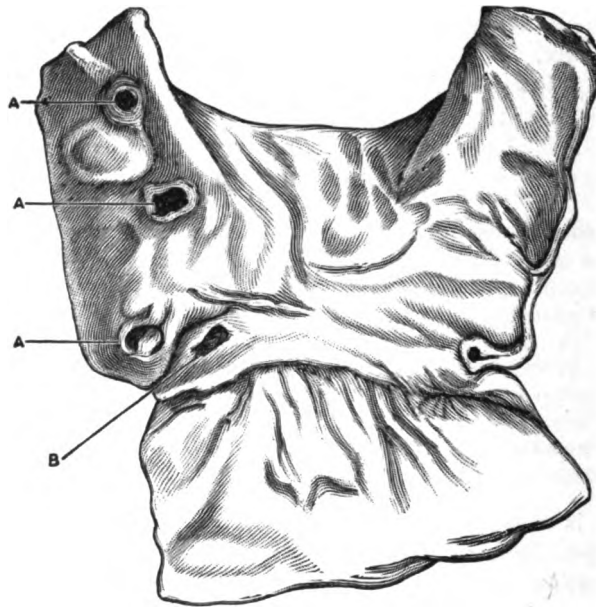
A DIAPHORETIC POWDER.—

R Pulv. camphor, ... gr. iss;
 Pulv. opii, ... gr. ss;
 Potassii nitrat., ... gr. v;
 Sacchar. alb., ... ʒ ii.

M. Ft. pulv. Sig. To be taken in a hot drink at bedtime.—*v. Graefe.*

Abstracts and Selections.

TYPHOID FEVER AS A SYSTEMIC DISEASE OF MANIFOLD MANIFESTATIONS.—It has become so common to regard typhoid fever as a local affection, the lesions of which are situated in the lower part of the small and the beginning of the large intestine, that the essentially systemic character of the disease has been more or less lost sight of. Of course it is clearly understood that the absorption of toxins from the typhoid ulcers in the bowel gives rise to very prominent constitutional symptoms, while the occurrence of spots on the skin shows a cutaneous attempt at one stage of the disease at least to eliminate certain toxic substances, biological or chemical in nature, from the circulation.



Drawing of the pyloric end of the stomach in a case of enteric fever. *a*—acute perforating ulcers with clean bases; *b*—an ulcer with adherent slough.

Most of the pharmaceutic schemes of treatment planned for typhoid fever, however, are limited to the use of drugs which act upon the intestinal tract. Intestinal antiseptics has been a favorite catchword of the ambitious therapist in many diseases beside typhoid, though each new attempt to create this condition has proved as ineffectual as the last. Further therapeutic claims in this line gain a ready hearing if they but seem to be bolstered up by a successful clinical experience. Of late years, however, we have come more and more to the realization that typhoid fever is as characteristically a constitutional disease as measles or scarlet fever. The main lesions in both of the latter diseases are situated in the upper air-passages,

but we by no means consider that the angina of scarlatina or the severe coryza in measles constitutes the essence of either disease, or furnishes the only indications for treatment. Prof. Chiari's work at Prague has shown that typhoid not infrequently limits itself to the bile passages, and this notwithstanding all that we have recently learned about the bactericidal power of bile. Osler's work in this country, besides confirming Chiari's observations as to typhoid localization in the bile passages, has served to show that, exceptionally at least, the lesions of typhoid fever are limited to other localizations—the spleen, for example. Certain French clinicians claim to have observed typhoid fever of the meninges, or a febrile disease in which the only possible cause discoverable was the presence of Eberth's or Jaffky's bacillus on these membranes.

Even where the lesions of typhoid fever are limited to the digestive tract we are gradually being brought to realize that they need not necessarily be localized within the immediate neighborhood of the cecum, but under special conditions of poorly resistive vitality typhoid ulcers may occur in other parts of the gastro-intestinal tract. A striking illustration of this is afforded by one of the plates in Prof. Hare's new book on the Medical Complications of Typhoid or Enteric Fever.* The illustration which we present herewith reproduces a set of typhoid ulcers that had developed in the stomach of a young girl, who succumbed during the third week of her attack. Four well-defined ulcers were noted in the pyloric region, one of which presented a loosely adherent slough. It appears that under certain circumstances, not well understood as yet, a diseased condition of the solitary glands of the gastric mucosa may give rise to a form of perforating ulcer of the stomach which closely resembles the idiopathic ulcer of typhoid fever, as that lesion is usually observed in the ileo-colic region of the intestine. It is interesting to note that in this case there was no hematemesis to arouse suspicion of ulcers of the stomach.

The great diversity of typhoid complications has by no means received the general attention the importance of the subject deserves, and we venture to predict that by their more diligent study many dark places in both diagnosis and treatment will be made plain. In this connection Dr. Hare, with characteristic energy, has taken a long step.

JOINT DISEASE IN INFANTS DUE TO OPHTHALMIA NEONATORUM.—In a paper read before the Royal Medical and Chirurgical Society at the last meeting, held on January 24th, Mr. Clement Lucas directed attention afresh to an original observation which he made in the year 1885, that the purulent ophthalmia of newborn infants was liable in certain instances to produce inflammations of joints similar to the gonorrheal rheumatism of adults. Mr. Lucas, in the year alluded to, published three cases in support of his views, and in his first communication, published on February 28, 1885, he made the following statement: "I am not aware that any connec-

* *The Medical Complications, Accidents, and Sequelæ of Typhoid or Enteric Fever*, by H. A. Hare, M. D., with a special chapter on the Mental Disturbances Following Typhoid Fever by F. X. Dercum, M. D. Lea Brothers & Co., Philadelphia and New York. 1899.

tion between ophthalmia neonatorum and synovitis has ever been observed or described, but there seems no just reason if, as is generally supposed, the synovitis of gonorrhea is the result of absorption of morbid products from the urethral mucous membrane, why the conjunctival mucous membrane should not offer an equally favorable absorbing surface. It is scarcely probable that the inflammation of these two joints could be referred to any other cause, and in my own mind there exists no doubt whatever that this is a case of gonorrheal rheumatism consequent upon absorption from the conjunctival surface." Little attention appears to have been paid to the observation in this country, but abroad it was at once recognized as a form of joint inflammation in infants previously undescribed, and Mr. Lucas was able to found his recent paper upon twenty-three published cases. The correctness of the clinical observation has been submitted to bacteriological proof. Darier, in 1889, found the gonococcus of Neisser in the secretion from the conjunctiva, and Deutschmann, in 1890, by aspirating the inflamed knee of an infant three weeks old, suffering from purulent ophthalmia, was able to show the presence of the gonococcus in the secretion taken from the joint, thus completing the chain of evidence. Mr. Lucas shows that the date at which the joint inflammation most commonly appears is at the end of the second week or during the third week of the ophthalmia. The joints most liable to be affected are the knees and wrists, more especially the left; but any joint may be attacked, and in some cases the tendon-sheaths have shown signs of inflammation. Although the inflammation may be intense, there is little tendency to suppuration, and when it occurs Mr. Lucas asks the interesting question as to whether another microbe may not be associating its effects with the gonococcus, for in two cases in which suppuration took place the gonococcus was found to be associated in one instance with the staphylococcus, and in another with the streptococcus. In reference to treatment, Mr. Lucas suggests that as the infecting source is the conjunctiva, the most important thing is rapidly to disinfect this mucous surface, and with the cure of the ophthalmia the joint inflammation will generally rapidly subside.—*Lancet*.

ULCERATIVE MEMBRANOUS TONSILLITIS.—H. de Stoecklin (*Centralbl. für Bakteriöl.*, xxiv, 17) records a case having all the characters of diphtheria without presenting Loeffler's bacillus, but instead spirochetes and bacilli larger than the diphtheria organisms, broad in the center and tapering toward the extremities, and staining well with methyl violet; with Gram the bacilli stain imperfectly, while the spirochetes are decolorized. The former appear devoid of movement; the spirochetes twist and turn with great rapidity. These organisms evidently correspond to those described by Bernheim, who considers this form of tonsillitis a pathological entity distinct from diphtheria. If Loeffler's bacillus be present, Bernheim considers that the disease has been grafted upon a true diphtheria. Stoecklin, in conclusion, puts two questions which further clinical and patholog-

ical investigation must answer: (1) Is the co-existence of spirochetes and fusiform bacilli constant in and pathognomonic of ulcerative membranous tonsillitis, or are there mixed cases in which the virulent organism of diphtheria is present? (2) If so, what is the frequency of such mixed cases, and how does the presence of fusiform bacilli and spirochetes influence the diphtherial infection, therapeutic measures, and, above all, the prognosis?—*British Medical Journal.*

SMALLPOX IN A NEW LIGHT.—The name of M. Drumont, the editor of the *Libre Parole*, is chiefly known in this country in connection with that latest Asian mystery, the Dreyfus case. But he apparently poses as an authority on other peccant humors besides political passion and religious rancor. Not long ago he favored the world with his views on smallpox and vaccination. He holds that Edward Jenner was one of those who have wrought most mischief to their fellow-men. This, of course, is only what your common or platform "antivack" is always telling us. But M. Drumont's charge against the discover of vaccination is not that he introduced a new disease or a new poison, but that he robbed mankind of a most valuable remedial agent, to wit: smallpox! "Smallpox," says this new Daniel of pathology, "has never been a disease. It is an admirable effort of the organism, a spontaneous operation of nature, which violently rejects, expels, and deposits outside the evil principles that are in the body. It is a flowering, a blowing, a sublime crisis. Consider," he adds, "the signs presented by croup, typhoid fever, pulmonary phthisis, and you will see that they are only manifestations of smallpox turned inward." We gather further that the "caustic matter" of smallpox in its travels about the body produces here a cancer, there meningitis. It is the cause of the increase of insanity and suicide. We should have thought, in our scientific simplicity, that the mere possibility of such dire consequences from the "turning inward" of smallpox afforded some justification for an attempt to keep it out altogether. But M. Drumont has a logic as well as a pathology of his own. He accepts modern teaching so far as to admit that there have always been bacilli; but his view is that in the good old days before Jenner smallpox played in regard to these organisms the part which Cromwell played to the Rump Parliament. Smallpox is, in fact, if we are to believe the oracle of the *Libre Parole*, the most useful scavenger of the human system; beside it as a "blood purifier" sarsaparilla must hide its diminished head. M. Drumont will, we are sure, agree with us that if smallpox is so successful in expelling evil principles, France at the present moment would be likely to derive considerable benefit from the "sublime crisis" of a purifying epidemic. It is true that he might not agree with us as to the evil principles which require to be expelled, but that is a detail.—*Ibid.*

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H. A. COTTELL, M. D., M. F. COOMES, A. M., M. D., Editors.

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WHAT TO DO WITH OUR CONSUMPTIVE PATIENTS.

No more important subject confronts us than the disposal of our patients in the early stages of phthisis. It is certain that there is not a spot in the Mississippi or Missouri valleys where the climate promises them any relief, while it is equally certain that to remain in these localities means a speedy termination in death in the great majority of cases, under the most favorable circumstances. Medicines may mitigate the sufferings of this class of patients and prolong their lives to a very limited degree, but as yet there is no drug which will absolutely arrest the progress of phthisis. Climate is the only thing in the way of certain relief, and while it is an old song that has been repeated so often, it will do no harm to hear it again: Sunshine and a temperate, dry atmosphere are the essentials of an antiphthisical climate. The United States abounds in such places, and it is useless to indicate any particular territory; but in making the selection steer clear of places where the air suddenly becomes chilled for a few hours, and also of the places where it is cold in one part of the day and warm the remainder of the twenty-four hours.

The time to secure the benefits of climate that are lasting is in the early stages of the disease. This is also the time when the patient is most likely to refuse to take the advice of his physician.

Our knowledge of phthisis and the means of making a diagnosis of its presence are such that it is always possible to give the patient timely warning, and thus enable him to take advantage of the only thing that offers any permanent way of avoiding an early demise.

It is the duty of every doctor to be positive with patients of this class. Tell them frankly what is expected if they remain, and what is to be expected by a change of climate. The life of any man or woman for ten, fifteen, or twenty years is a matter of very great importance, not only to the individuals, but to those who may be dependent in one way or another upon them; hence for this reason, if no other, they should know every thing.

It is a false notion of withholding the facts from such patients, or deluding them with the hope of recovery through the aid of drugs. They pay you for your opinion, and they are just as much entitled to the facts as they would be if they consulted a lawyer about some commercial transaction, in which his advice would enable them to avoid a loss of money; and a great deal more so, for it is life in one instance and money in the other.

I have seen many a good man go to an untimely grave because he had not been made acquainted with his exact condition. Do not withhold any fact from a patient in the early stages of consumption; give him his only chance, a suitable climate.

Notes and Queries.

THE STANDARDIZATION OF DRUGS.—Hitherto the practice has been to fix a standard of strength only for such drugs as are amenable to chemical assay. This includes, of course, such drugs as *nux vomica*, *opium*, and *cinchona*, regarding which standards were formally adopted at the revision conducted in 1890, and also *ippecac* and *belladonna*, which the British pharmaceutical authorities have since added to the pharmacopeia recognized in the British Isles. The American revisers will no doubt include the latter drugs in the new pharmacopeia of this country, and it is highly probable that they will likewise admit and fix standards for the *Calabar bean*, *gelsemium*, *hyoscyamus*, *podophyllum*, *colchicum*, *conium*, *stramonium*, and *veratrum*, all of which lend themselves to chemical analysis.

The question is whether the work of the committee should stop here. Why, it is asked, should no standards be fixed for such drugs as *ergot*, *digitalis*, *strophanthus*, *aconite*, and *cannabis indica*? They are all drugs which are in universal use, and their quantitative standard is surely of as

much consequence both to the physician who prescribes the remedy and to the patient who takes it as that of any other medicine. "It matters little," as one authority observes, "how much crude ergot goes to the fluid pound of the extract if the fluid fails to produce a characteristic physiologic action." What, then, is the objection to standardizing these drugs as well as others? Only this, that the drugs in question are not amenable to chemical assay, or at all events can not in the present state of chemical knowledge be assayed chemically with a sufficient degree of accuracy to justify the fixing of a standard measured quantitatively. But is this any reason why no attempt should be made to fix a standard by other means? Scientific inquirers conducting private investigations are not content to rest there, and neither are the higher class of manufacturing chemists. Acknowledging and making use of the chemical test whenever it can be applied with satisfactory results, they have recourse to physiologic tests, which as regards the question of potency are for all practical purposes equally reliable. At present, as has been pointed out, a practitioner who writes a prescription, say for digitalis, in a dozen different parts of the same town will find in some instances that he obtains a drug which exhibits a satisfactory physiologic action, and in others no satisfactory action whatever. This is submitting the drug to a physiologic test when it is too late. If, instead of leaving the patient to be experimented on, similar tests had previously been made with the article on some of the lower animals, the potency of the drug would have been known, and the doctor would be aware of the exact strength as well as the nature of the remedy he is prescribing. That the present condition of matters in this respect is recognized by the profession as eminently unsatisfactory was shown by the discussion which took place at the recent meeting of the American Medical Association at Columbus, Ohio, and it is hoped that the Revision Committee will deal with the subject in a sufficiently bold manner to provide an adequate remedy. To this end, however, it is necessary that it should be fortified by expressions of opinion both from medical men and the manufacturers of drugs, it being to the interest of none, so far as we can see, except traders in inferior classes of drugs, to oppose the standardization of as many as possible of the drugs that are used in the practice of therapeutics.—*Medical News.*

DIPHTHERIA ANTITOXIN AS A PROPHYLACTIC.—In Treatment (Jan. 12th) Dr. F. J. Allan, medical officer of health of the Strand District, narrates a personal experience which illustrates the immunizing action of antitoxin in an institution accommodating sixty children varying in age from one and three quarters to seventeen years. Most of them slept in two large, airy dormitories, and the class-rooms occupied during the day were also large rooms. Early in February, 1898, one of the children, during a visit to a friend, was exposed to infection from a case of diphtheria, and on returning home on the same day developed the disease herself and communicated it to the girls in the beds on each side of her own. These three cases were

removed to a hospital, and no further cases appeared until a few days after their return home in the beginning of March. By March 23d five cases had occurred in the same dormitory, and a bacteriological examination of the throats of the three former cases revealed the fact that two of them contained typical diphtheria bacilli. Up to April 29th several other children developed the clinical symptoms of diphtheria, and several more had inflamed throats without membrane. On April 29th at Dr. Allan's suggestion a protective dose of antitoxin was given all round, and from that day, although the organisms persisted in the throats, there were no more cases of diphtheria or of sore-throat. Of the sixty children, nine only never gave evidence of infection, fourteen were in hospital, leaving thirty-four children at home in addition to the first three returned from hospital. As time went on the organisms in these thirty-seven throats became less and less typical in form, and by June 15th all had disappeared. The immunizing dose of antitoxin is from one to three hundred units, according to age, and the immunity thus produced ordinarily lasts for a period of at least four weeks.—*Lancet*.

REPORT OF THE INTERNATIONAL CONGRESS ON TUBERCULOSIS.—A preliminary report of the work of the congress has been issued in England as a Parliamentary paper. The results of the meeting are interesting and yet not new. Methods of prophylaxis are discussed, with special reference to ventilation, food, and sanitary dwellings. Directions are laid down as to the disposal of sputum, and considerable stress is put upon the open-air treatment and the establishment of sanatoria. In general, much hope is expressed for the future, both as regards prophylaxis and treatment. It is becoming evident that tuberculosis is gradually losing its terrors as our knowledge increases. Nothing can do more toward lessening the ravages of the disease than a widespread recognition among the people of its cause, of the means of prevention, and of its rational treatment when acquired. Of interests is the fact that in the abstract before us no mention is made of tuberculin in treatment; its one recognized value is as a diagnostic test in cattle, and even that is not without its drawbacks.—*Boston Medical and Surgical Journal*.

ACCESSORY THYROID BODIES AT THE BASE OF THE TONGUE.—At a recent meeting of the Pathological Society of Philadelphia, Dr. H. L. Williams presented two cases of this rare anomaly. A woman, aged fifty years, complained of a growth at the base of the tongue, which she had had for eight or ten years without much inconvenience, but which had begun to enlarge and to produce dyspnea and difficulty of speech. It lay in the median line just above the epiglottis. The growth was about one and a fourth inches in width and one inch in thickness; oval, rounded, and smooth on the surface except at the top, where it was superficially ulcerated and covered with a whitish membrane. A small portion was removed and showed microscopically in addition to signs of inflammation, typical thyroid struct-

ure containing colloid material. In the second case the patient was a young woman, aged sixteen years, who had a growth at the base of the tongue for five years, which had recently enlarged, causing some dysphagia. It was situated in the same position as the growth seen in the first case. On removal by the wire cautery it measured one and one eighth inch in length, one inch in width, and three fourths inch in thickness. It was soft and spongy in appearance, surrounded by a fibrous capsule, and showed a delicate reticulum of fine filaments extending through it in all directions. The surface was reddish, in some areas whitish, glistening, and resembled the thyroid gland. Microscopically a meshwork of acini, separated by a delicate reticulum of connective tissue, was seen. The acini were almost invariably dilated and cystic, and filled with colloid material. The diagnosis of cystic thyroid tissue undergoing colloid degeneration was established. Thyroid tissue at the base of the tongue is readily explained embryologically. The middle thyroid area first appears as a ventral outgrowth from the entodermic lining of the primitive pharynx at a position corresponding to the second visceral arch. This outgrowth rapidly elongates and generally loses its attachment with the epithelium of the pharynx, the connection being represented by a fibrous band (thyroglossal duct) which emerges from the tongue at the foramen cecum. When thyroid tissue is found in this locality it is formed from embryological remnants at the upper extremity of the thyroglossal duct.—*Lancet*.

SOLITARY TUBERCLES OF THE HEART.—At the recent annual meeting of the Medical Society of California, Dr. A. W. Hoisholt reported an extensive involvement of the heart in a case of tuberculosis. The writer's statement of the unusual condition found is, in part, as follows: "The tuberculosis was evidently primarily located in the left pleura, and from here extended by contiguity to the pericardium, bronchial glands, ribs, and sternum. The tuberculous pericarditis led to the development of subpericardial tubercles, which by conglomeration formed two large, solitary tubercles, one situated about the center of the wall of the left ventricle, the other in the right auricle below the arch of the aorta, the tuberculous process burrowing into the myocardium."—*Boston Medical and Surgical Journal*.

HYPODERMIC FEEDING WITH YOLK OF EGG IN ANEMIC CHILDREN.—Muggia, of Turin (*British Medical Journal*), has for some time treated children suffering from anemia and athrepsia by the hypodermic injection of a preparation of yolk of egg. Freshly laid hen's eggs are taken and carefully washed before opening. The yolks are received into a sterile glass vessel, and are weighed and then mixed with one third of their weight of physiological salt solution. The mixture is then thoroughly stirred up with a glass rod and filtered through aseptic absorbent gauze. The liquid thus obtained is of a bright yellow color and of homogeneous consistency, and can be used for hypodermic injection. It is well to begin with an injection of about 1 c. cm. made into the buttocks or the lumbar region, and, provided

asepsis is strictly observed throughout, there is no local or general inflammatory reaction. The region of injection should be slightly massaged. The quantity of hypodermic injection is gradually increased till a limit of 10 c. cm. per injection is reached. The duration of treatment varies according to each case, but in any case not less than 100 c. cm. (twenty injections of at least 5 c. cm. per dose) should be administered. According to Muggia's observations, it appears that both the body weight of the children and the percentage of hemoglobin in the blood increase in the case of athreptic infants. The number of red corpuscles also rises, and this occurs much more readily than if lecithin were administered in the same way.—*Maryland Medical Journal*.

MODES OF INFECTION OF LEPROSY.—Dr. Prince A. Morrow, of New York, read a paper on this subject at the recent meeting of the American Dermatological Association. He stated that very little significance should be attached to infection through sexual intercourse. It is quite possible that the mode of salutation of rubbing the noses, which prevails in Iceland and Hawaii, may have been partly responsible for the spread of the disease in those countries. The plague of mosquitoes and the plague of leprosy appeared in the Sandwich Islands about the same time, and a causal relationship has been claimed. Until recently numerous searches had failed to reveal the presence of lepra bacilli in mosquitoes. The writer discredits the part alleged to be played by the mosquito in the production of leprosy. Leprosy usually occurs first upon the exposed surfaces, face, hands, etc. Many believe the skin to be the point of entrance of the germs. The probability is that there are many modes of infection, but the most frequent channel of infection is, according to the views of most leprologists, through the upper air-passages. The writer believes inhalation to be a frequent cause. Blashko collected thousands of lepra bacilli upon plates placed in the immediate proximity of lepers. Certain conditions predispose to leprosy. Some individuals are absolutely immune. An individual predisposition seems to be the most important favoring factor. Catarrhal conditions of the upper air-passages are also strong predisposing causes. Nearly all lepers give a history of a "cold" at the onset of the disease.—*Boston Medical and Surgical Journal*.

REMARKS ON THE TREATMENT OF SCABIES.—Dr. S. Sherwell condemns the treatment of scabies by irritant ointments of various kinds. He urges the adoption of a method which he declares is "better, cleaner, and easier." The patient is instructed to take a thorough bath, after which sand soap is to be used upon the tougher portions of the integument. A half teaspoonful of powdered washed sulphur is then rubbed over the entire skin surface. The same quantity should be placed between the bed sheets and shaken so as to evenly distribute the powder. This should be repeated for several nights, a cure being usually effected in a week. The writer has never seen a dermatitis follow this treatment. He also advises its use as a prophylactic measure whenever an individual is exposed to scabies.—*Ibid*.

Special Notices.

SANMETTO IN ENURESIS NOCTURNA.—While visiting my nephew in Illinois last Christmas he told me his little girl, six years of age, had always "wet the bed" at night, and asked me, "What shall I do for it?" I procured three ounces of Sanmetto, all the druggist had at the time; the second night she missed, and has had but three nightly emissions in two weeks. He wrote me last week, "We consider her cured, but shall keep an original bottle on hand and use if necessary." I have uniformly good results from prescribing Sanmetto in kidney and bladder complaints.

Saginaw, Mich.

T. T. HUBBARD, M. D.

CHEMICAL FOOD is a mixture of Phosphoric Acid and Phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., to whose advertisement in this issue we refer our readers, have placed upon the market a much improved form of this compound, "Robinson's Phosphoric Elixir." Its superiority consists in its uniform composition and high degree of palatability.

WM. R. WARNER & CO. are calling attention to four of their specialties—Ingluvin, Lithia Tablets, Tono Sumbul, Elixir Salicyclic Comp.—in the advertising pages of this issue. They are all first class remedies and should be liberally prescribed by physicians. When we say should be prescribed, we mean that the preparations are so eminent that we can not but recommend them thus strongly. Samples of Ingluvin and Lithia Tablets will be sent on request.

I HAD rather a queer experience with your sample of Ecthol. I took it twenty miles north and gave it to Nicholas Diaz. He has had scrofula for four years, and has paid out in that time over one thousand dollars. He took a teaspoonful every two hours for four days, after that a teaspoonful every four hours until he had used two bottles. He walked in here to-day cured. All signs of swelling and those awful scrofula sores and blotches on his face are gone. Of course, his soft palate was destroyed by the disease long ago, and he thought I could make him a new one. I replied, only God can do that. He paid me enough, so I can buy more of your remedies, and I shall keep a supply on hand. I buy of Dr. Barry, of Durango, Mex., who orders for me from San Antonio, Tex.

CHAS. A. BAILEY, M. D.

Canatlan, Durango, Mex., September 29, 1899.

SANMETTO IN ANEMIC, UNDEVELOPED YOUNG WOMEN.—I have used Sanmetto with profit in a case of a young woman who was troubled with a very irritable bladder and urethra, caused from an excess of uric acid crystals in the urine. The Sanmetto accomplished what I did not expect. The mammæ had never developed very much, nor the chest and shoulders. She was also quite anemic. I gave her a bottle of Sanmetto with no apparent improvement except toward the last she felt a little more vitality. I then procured another bottle at the drug store here and gave her about half of it. There is now a marked improvement in her general health, the mammæ are about double the former size; her shoulders and neck are becoming very much more plump, and her chest is so much broader that she can scarcely wear the clothing worn before. She is looking very much better. But nothing seems to dissolve the uric acid crystals as yet.

F. E. DOANE, M. D.

Kansas City, Mo.

THE AMERICAN PRACTITIONER AND NEWS.

"*NEC TENUI PENNÂ.*"

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No. 8.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

CERVICAL TUBERCULAR ADENITIS.*

BY F. C. SIMPSON, M. D.

It is met with at all ages, more frequently in childhood and about maturity, occasionally met with in middle life. One of the special predisposing factors in lymphatic tubercular enlargement is catarrhal inflammation of the mucous membranes. You will find that slight catarrhal inflammation will frequently be followed by swelling of the cervical glands, especially so in the young subject, who early in life has shown some hereditary predisposition. You take a child with a constantly recurring naso-pharyngeal catarrh. The bacilli lodged there will find their way to the nearest gland. Of course, if the child is in good health, the local resistance would be active enough to throw off any invasion of the glands. Just the reverse occurs where the system is so weakened; the gland is not able to resist the bacilli, and, the field being good, the little microbe goes to work. When one set of lymph glands are diseased, other glands are likely to follow. You have cervical glands most frequently diseased, and when diseased you may have bronchial trouble without tubercular deposit taking place in the lung. It is not an uncommon thing to find glands involved and find no tubercular lesion in the lung. You may have glands in the axilla diseased. You see this more frequently when cervical glands are involved. As a rule, the enlarged glands produce very little local disturbance. They usually remain quiescent, or soften and are evacuated, giving little or

* Read before the Louisville Medico-Chirurgical Society, June 16, 1899. For discussion see p. 292.

no trouble. You will find these subjects anemic and debilitated, especially early in life. Most of these cases are free from discomfort, except those of a febrile character. They complain more from the deformity than of any physical pain.

Enlarged lymph glands are to be recognized as tuberculous only when the bacilli are found in them, or where inoculation in animals results in tuberculosis. The tubercular nature of the glands may be inferred if you have tuberculosis in some other portion of the body.

In the diagnosis of tuberculous lymph glands syphilis should be excluded. Syphilitic enlargement of the glands of the neck are not very common, and when you do find them they are hard, and seldom sup-purate. They are, as a rule, uniform in size. Another point to be considered is enlarged glands in patients at middle life, as that is the time you find malignancy so frequent. You find when several glands are affected one or two are larger than the rest. They may vary in size from a pea to a walnut, and some as large as a hen's egg. Usually you find two or three glands fused together, making one large gland.

You may find inflammation of the cellular tissue, which renders the gland adherent to the neighboring parts. You may have resolution, which occurs most frequently, or it may go on and form an abscess.

In regard to treatment, you must exercise sound judgment. If the glands are small and freely movable, you leave them alone. Your duty is to build up the patient by giving tonics, such as iron, cod-liver oil, hypophosphites, etc. Fresh air, sunshine, good ventilation constitute the most efficient and curative treatment. Send these patients to the seashore if they can afford it; send them to the country where they can get good fresh air. So far as local treatment is to be used, you may expect very little. Tinc. iodine painted over the glands was supposed to be of benefit at one time. Do not use it. Experience does not show that any of the ointments do good.

It is important to keep these glands covered and protected, and a protective plaster is useful. A plaster I often use is one made of belladonna and mercurial ointment spread on a piece of lint and kept in place by a bandage. Never poultice these glands until pus is formed and evacuated, as you may have a large abscess formed, which is to be deprecated. As soon as pus is formed, make a free opening so as to insure good drainage. Always encourage suppuration after you open the abscess. This is best done by hot dressings.

It should not be forgotten that in adults a cure is to be hoped for by suppuration, while in children there is a strong tendency to resolution. In pursuing our general and local treatment toward a cure, we should see that the original cause of trouble is not maintained, such as the naso-pharynx and tonsils. Excision is only indicated when one or two glands are involved and the tumor is superficial and movable.

The objection to operating is more glands are involved, and as soon as one is removed another of greater depth presents itself. So in the major portion of these cases let the glands alone, pursue your general treatment, and they will get well. In my service at Masonic Home, extending over ten years, I met with a number of these cases, and not a one was operated on, and not one suppurated. I have never had one to suppurate in a patient under ten years.

In looking over the literature of the past few years I find that a great many of the surgeons are refusing to operate only on a few selected cases, as I have stated above in my paper.

LOUISVILLE.

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LISTERISM AND BACTERIA.

BY W. SYMINGTON BROWN, M. D.

As a prelude, allow me to say that I entertain the highest respect for Lord Lister as a scientific surgeon. Next to the discovery of anesthetics, his campaign against dirt has done more to elevate surgery than any other agency in our day. At the same time I believe that his theory about deleterious microbes in the atmosphere, which Sir Joseph tried to destroy by carbolic acid spray, is a fallacy. In an address delivered before the International Medical Congress at Berlin, he says:

"As regards the spray, I feel ashamed that I should have ever recommended it for the purpose of destroying microbes in the air. If we watch the formation of the spray and observe how its narrow initial cone expands as it advances with fresh portions of air continually drawn into its vortex, we see that many of the microbes in it, having only just come under its influence, can not possibly have been deprived of their vitality. Yet there was a time when I assumed that such was the case, and, trusting the spray implicitly as an atmosphere free from

living organisms, omitted various precautions which I had before supposed to be essential. . . . If, then, no harm resulted from the admission, day after day, of abundant atmospheric organisms to mingle unaltered with the serum in the pleural cavity, it seems to follow logically that the floating particles of the air may be disregarded in our surgical work, and, if so, we may dispense with antiseptic washing and irrigation, provided always that we can trust ourselves and our assistants to avoid the introduction into the wound of septic defilement from other than atmospheric sources."

Carbolic acid spray has long since been abandoned. Our distinguished *confrère*, Dr. Marcy, still pours a stream of diluted oxygen over the patient's abdomen during a laparotomy, though with what object in view I confess is a puzzle to me. Atmospheric air is as full of microbes as it ever was; but we no longer fear them during a surgical operation. As Miss Florence Nightingale once said, when asked whether night air was good for patients to breathe, "What other kind is possible after sunset?" The medical profession is still scared by the presence of bacteria on the patient's skin and the surgeon's hands. Dr. Howard Kelly has enunciated an elaborate regimen for the latter, with which you are all familiar, terminating in a permanganate dye, to be removed by a solution of oxalic acid. According to some bacteriologists, deep-seated microbes still impudently remain on the operator's hands after all this heroic ablution.

Bacteriology is based on the assumption that certain acute diseases are due to the influence of specific micro-organisms. I believe that the presence of bacteria is a result and not the cause of a disease. In other words, bacteriologists put the cart before the horse. Infectious diseases generate peculiar poisons, some of which may be accompanied by bacteria; but we possess no satisfactory proof that they constitute the primary cause of the disease. Injections of bacteria are accompanied by a portion of the fluid in which they live, and it seems more rational to conclude that the poisonous secretion is the cause of the disease.

Metchnikoff, a celebrated scientist, advanced the phagocyte theory that the function of certain cells was to absorb or destroy dangerous microbes—a convenient loophole through which to explain why some surgical cases, in which no antiseptic precautions were employed, nevertheless did well; but the phagocyte theory at present has few, if any, supporters. Lord Lister says, "I can see that while the measures to which I have referred are, so far as they go, highly valuable, it must

be in itself a very desirable thing to avoid the direct application of strong and irritating antiseptic solutions."

Dr. Bantock, of London, recently read a paper before the British Gynecological Society, entitled "The Modern Doctrine of Bacteriology, or the Germ Theory of Disease, with Special Reference to Gynecology," which should be read by all surgeons who treat diseases peculiar to women. He says:

"In a case in which the whole perineum and vulva were in a state of extreme irritation from the relaxed or irritable state of the bowels—due to the exposure of the mucous membrane of the rectum—and without any precaution beyond wiping the surface with a warm, wet sponge, I secured union by first intention, the diarrhea ceasing from the moment of the completion of the operation. I dissect out vulvo-vaginal glands, obliterating the cavity in stages; I remove growths from the vulva, stitching up the wounds, and have never failed to obtain union by first intention. I sew up a bilacerated cervix, and have yet to record a failure. . . . I have, either by accident or of set purpose, opened the small intestine, the rectum, urinary bladder, and vagina in abdominal operations, in which the bacillus coli must, for a short time at least, have had free access to the peritoneal surface, without any harm. And if I obtain these good results by the adoption of simple cleanliness, in the common, every-day acceptance of the term, and such arrangements as any well-ordered private house can afford, where is the necessity for all those elaborate precautions which we hear of, . . . the sterilizing of instruments and dressings, the spraying of the room for an hour or two before the time of operation, and so forth—precautions and preparations so eloquently satirized by Mr. Treves in *The Ritual of an Abdominal Operation*?"

For many years I have protested against the employment of corrosive sublimate as a disinfectant in the abdominal cavity, or even in the vagina. Weak solutions are more readily absorbed than strong ones, and, consequently, are more dangerous. I have also abandoned the use of carbolic acid on account of its irritating effects on the bladder and kidneys.

It appears to me that the rôle played by bacteria in disease is at least an undecided question. It seems more probable that deadly diseases result from chemical changes occurring inside and outside of organized bodies than that they are due to bacteria. We possess no reliable evidence that chemical transformations ever produce new forms

of life. Theoretically, the thing is not impossible; practically, it has not been demonstrated. Eggs from organized parents constitute the law of life. Animal secretions may be beneficent or poisonous, but they do not produce life. Hydrocyanic acid is one of the most deadly poisons. Does any one suppose that its action depends on the presence of microbes?

We all are indebted to Lord Lister for his painstaking advocacy of cleanliness, and he also deserves our thanks for the candor and manliness with which he acknowledges his mistakes.

STONHAM, MASS.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, June 2, 1899, the President, William Cheatham, M. D., in the Chair.

An Embryo at Six Weeks. Dr. Turner Anderson: I present a specimen which has interested me very much, and which I recovered from an abortion, an ovum at six weeks. I obtained the exact date of the last menstrual period, and, based upon this information, it would make the specimen presented, the ovum, at six weeks of utero-gestation. It is rare I think that we see a specimen which illustrates the development of the ovum as typically as this; it is not often that we obtain a specimen as small as this. We have all seen pictures of these conditions in books, but it is not often that we have an opportunity to observe the specimens themselves.

This was a spontaneous abortion, perhaps caused by disease of the endometrium; there was a history of chronic endo-uteritis. The woman had suffered from leucorrhea, perhaps a uterine leucorrhea, and there had been a great deal of hypersecretion. She had previously borne several children.

Discussion. Dr. T. S. Bullock: I want to congratulate Dr. Anderson upon his good luck in recovering this specimen. I have never seen one younger than this, and it is a beautiful exemplification of the processes which take place, and which heretofore we have only been able to study in the lower animals. This is the youngest human ovum I have ever seen.

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

Dr. Turner Anderson: The knowledge of the processes which take place in the development of the human ovum is of considerable importance to the general practitioner and the obstetrician, because it gives him a better idea of and more assurance in regard to dealing with the secundines, etc. In this case there was no question that every thing had passed.

As somewhat bearing upon this question, I will briefly report a case which shows how difficult it is sometimes to produce an abortion; how the sound may be introduced into the uterus without disturbing the ovum. It has been said that to produce an abortion in the early months of utero-gestation is not difficult; we know that the ovum does not fully occupy the cavity of the uterus until termination of the third month; we know that the internal os is still open up to this time, and a sound may be passed in before the decidua reflexa has developed around to close up entirely the orifice. When these things are remembered, it is not so surprising that efforts even at criminal abortion fail; that sounds may be introduced into the uterus and remain there for a time and are then removed without producing an abortion.

I was particularly struck with the foregoing in connection with the case which I shall briefly report. I was called upon to operate on a young woman, thirty years of age, who had been delivered, after a very hard labor, of a child with forceps. I was asked about fifteen months afterward to operate for a vesico-vaginal fistula. Urine leaked from the bladder constantly, and the bladder had contracted very much.

The only evidence that presented upon careful inspection of the whole interior of the vagina was just up near the os, which had been lacerated on the right side; just within this lacerated portion I could, by packing around it, see that urine was flowing from the upper angle of the laceration. There had been a unilateral laceration upon the right side.

The condition looked very ugly; I could not see the rent in the bladder; it was high up, constituting a vesico-utero-vaginal fistula. I could pass the sound into the uterus, tracing the canal on upward, finding that it was pervious, and had no difficulty in making out that there was a laceration of the cervix which had extended, involving the bladder wall up very near the angle on the right side.

Before I began the operation the patient had been examined by several other physicians, who thought it would be necessary for me to turn the uterus into the bladder; that the only thing to do would be to let

the woman subsequently menstruate through the bladder. There are cases in which this operation is advisable and is the only thing that can be done; such operations have been performed, but the history of these cases is not satisfactory; the women are doomed to suffer greatly from the influence of menstrual blood upon the mucous membrane of the bladder, and they have a hard time.

I operated and succeeded in pulling the uterus down far enough to pare the edges and close opening in the bladder; then went on and did a trachelorrhaphy. I completed what I thought at the time a rather unsatisfactory operation; I did not feel that it would be successful; introduced a drainage-tube into the uterus, which did not seem to go further than the ordinary depth of the cavity of the uterus, and this was left in. The drainage-tube came away two days later. The vagina was douched afterward. The bladder was washed out with boric acid, and after a time upon examination, to my great surprise, it was found that I had a complete result; I had perfectly succeeded in repairing the fistula by the operation. The woman remained in the hospital four weeks, and before allowing her to go home I wanted to satisfy myself that the cavity of the cervix was pervious, so I had her taken into the operating-room and passed a sound into the uterus.

Now comes the most interesting feature in connection with the case: The operation was performed on the 15th day of December, 1898. Her menstrual periods had been slightly irregular, her last menstruation having been November 25th. On December 15th the operation was performed. Every thing went along smoothly, and I thought every thing was smooth until I was informed that her abdomen was enlarging very gradually; that she had developed a tumor. I advised that she be brought back here so I could examine her, when it was found that she was fully seven months pregnant. A trachelorrhaphy had been performed upon this woman, a drainage-tube had been placed in the uterus, the uterus had been sounded, yet an abortion was not produced thereby; all this manipulation was done at a time when she was pregnant, yet the condition was not suspected. All the data that I am able to gather in connection with the case, the dates, etc., go to show that this woman was pregnant at two months when the operation was performed.

Dr. H. A. Cottell: This is another of Dr. Anderson's wonderful cases of operation during pregnancy without producing a miscarriage, which

of course means that the operation was performed with a great deal of skill.

Dr. William Bailey: I only want to emphasize that it is remarkable that such an operation could be performed, where the catheter, sound, and drainage-tube were used, without producing an abortion. If such cases were common, the professional abortionists would find a great deal more trouble than now. The case is certainly a very remarkable one. It may be, however, when the time for delivery comes, it will be found that the woman was not two months pregnant at the time of the operation, because we are sometimes deceived as to the time. I remember a case a short time ago in which I waited three months after the woman said it was her time to have a baby before she really was delivered.

Dr. T. S. Bullock: The case is very remarkable, and shows how tolerant some uteri are to instrumental manipulation. I have been impressed with this upon several occasions, never when the ovum was quite as young as in this case, where we all know that abortions are usually very easily produced, the hold of the ovum on the uterine surface not being as intimate this early, before formation of the placenta and the secundines, as it is later. But on one or two occasions in producing a therapeutic abortion I have been very much struck with the tolerance of the uterus, seeming to negate the extra precautions we ordinarily take in instructing the patient with reference to her actions during this period. Dr. Anderson will recall several cases in which we were forced to induce premature labor for therapeutic reasons, where we had to introduce the bougie several times, leaving it intact twenty-four hours or possibly longer, two or three separate introductions of the bougie being necessary before uterine action was aroused sufficiently to dilate the os.

It is remarkable in the case reported, with all the manipulation necessary to close a vesico-utero-vaginal fistula, with subsequent introduction of a drainage-tube, catheter, and sound to render the doctor certain that he had not produced atresia of the cervix—it is remarkable, I say, that an abortion did not result.

Dr. F. C. Wilson: One point, not brought out thus far, is of importance, and that is the knowledge of fetal diagnosis, as guarding the surgeon against mistakes. The patient came to Dr. Anderson represented as being the subject of a "tumor," and we know that in times past cases of pregnancy as far advanced as this have been operated upon,

or operations have been commenced, only to reveal the true condition present. Of course surgeons ought not to make a mistake of this kind, yet it has been done time and again. When pregnancy has advanced to six and a half or seven months, the fetal heart-sounds can be distinctly heard, yet in such cases diagnosis of ovarian or fibroid tumors has been made, and all arrangements have been perfected for an operation. A better knowledge of fetal diagnosis would save the surgeon or obstetrician from such mistakes.

Meningocele. Dr. A. M. Vance: I would like to make a continued report of a case which was reported to this Society some time ago. I was called by Dr. Goodman to see a child, five months old, who had a very large meningocele between the frontal and parietal bone on the right side. At 10:30 o'clock in the morning I aspirated this meningocele and drew off half a listerine bottleful of fluid, probably about half a pint. I put a skull cap of crinoline tightly down over the child's head. At twelve o'clock I had a telephone message that the skull cap had come off. I was very much surprised, and at 3 o'clock went to see the child, and found the meningocele was as large as it was before aspiration. I wondered where all this fluid came from, and concluded that the whole cerebro-spinal system of the child must be distended with fluid, and relief at the point of the meningocele had allowed the accumulation of fluid in the deeper parts of the system to fill the sac, showing that the cerebro-spinal fluid flows in the direction of the cranium.

I proposed then to do a radical operation upon the child, which was declined. It lived thirteen months, when I saw it again in consultation with two other physicians. The meningocele was almost as large as the child's head; the child was in coma, and had not secreted any urine for twenty-four hours. I then declined to interfere, and the child died a few hours after I saw it.

THOS. L. BUTLER, M. D., *Secretary.*

Stated Meeting, June 16, 1899, the President, William Cheatham, M. D., in the Chair.

Exhibition of Peters' Instrument for Removing Tonsils: With Remarks. Dr. William Cheatham: I present an instrument known as Peters' tonsillotome, which I have used but once. I had a patient, a young man, nineteen years of age, with syphilitic enlarged tonsils, who did not respond to anti-syphilitic treatment very readily, and in removing the enlarged tonsils this instrument was used. I have reported

one or two cases previously where patients did not respond to treatment for syphilis until after enlarged tonsils had been removed. I think it is a little risky to operate upon enlarged tonsils in the secondary stage of syphilis, still this is the third case I have had in which the disease did not yield to any kind of constitutional treatment until after removal of the tonsils. In all cases the tonsils were very large and covered with mucous patches. In the present case I was a little afraid to remove the tonsils by any of the ordinary methods, and made use of this instrument, which operates by means of the cold snare. The operation was practically bloodless.

An objection to the instrument is that the thumb-screw is not sufficiently long to allow the wire to cut entirely through a large tonsil. Instead of using the end piece recommended by Peters, I had to employ a larger one, making a snare of piano wire No. 10. Although the tonsil was highly inflamed, there was no blood lost. The tonsils were anesthetized with cocaine. In operations of this kind I now use digitaline comp. in order to overcome any bad effect of cocaine on heart; also extract of the suprarenal gland combined with cocaine.

Discussion. Dr. J. M. Ray: I recently saw an article by Peters where he recommended the use of this instrument in removal of the tonsils. He gives a general anesthetic and removes the tonsils quickly. I have never used his instrument, but have a large snare that can be used for the purpose. Removal of the tonsils by this method is very painful, but there is usually no hemorrhage. I have never seen a patient that would allow the second tonsil to be removed with the cold snare on account of the pain experienced in removal of the first one.

Dr. William Cheatham: In the case reported, the patient did not complain of any pain, although the instrument was in the throat for a long time. By using cocaine combined with extract of the suprarenals you do not have much pain. If you will blanch the tissues with suprarenal extract, then use cocaine, you get the full effect of the drug, as we know cocaine has little or no effect upon inflamed tissues.

I have reported one case where I attempted to remove an enlarged calcareous tonsil with the old McKenzie snare where the wire broke; I also broke my tonsillotome, and had to finally use a knife. The patient did not complain of much pain from the knife, although I was fully twenty-five minutes in getting the tonsil out.

Peters has also devised a pair of forceps with which to catch the tonsil and pull it into his instrument, so that it may be engaged.

The essay of the evening, "Cervical Tubercular Adenitis," was read by Frank C. Simpson, M. D. [See p. 281.]

Discussion. Dr. J. B. Marvin: This subject is one of considerable importance, and demands a little more treatment than the essayist has given it. He has been extremely brief and concise. There were several points which occurred to me while his paper was being read: First, in children, the so-called scrofulous glands, as they were formerly called; I believe it is pretty well settled now that they are tubercular. The battle has not been fought and won without a struggle, and there is some dispute yet as to whether they are all scrofulous, or part scrofulous and part tubercular. There are many interesting points along that line, and it would certainly seem that there must be two degrees at least in virulence. The experiments of bacteriologists and pathologists would seem to show that in all those glands now called tubercular since Koch's discovery of the tubercle bacillus, and contrary to Virchow's old classification, that there are varying degrees of virulence; some do not produce, when injected into the lower animals, tubercular trouble as markedly or as virulent as in others.

Personally I have seen three different kinds as far as results of the glandular enlargement were concerned. One where there has been a distinct history of tuberculosis in the family, where either the father or mother has died of this disease. I have a case on hand now, the mother being tuberculous, where the second child has had a number of these glandular enlargements. At first there would be found a little redness on the surface, then a sense of fluctuation; later there would appear a minute perforation, giving exit to a clear, rather thin, somewhat sanious fluid. Several of them have ruptured in this way spontaneously, leaving a little pit or mark looking very much like the "pock" resulting from chickenpox. Some of the glands in the same child I punctured with a hypodermic needle and injected them with peroxide of hydrogen. They have never grown beyond that.

Another class is where there would be more fever. The class previously spoken of is non-febrile. I recently had a child with this condition where the temperature ran up to 104° F. It was of an intermittent variety, and I thought at first that he had malaria, and saturated him with quinine. Then the glands of the neck began to enlarge, some of them becoming almost as large as a hen's egg. They have since gone down, leaving a hard knot not larger than a marble. I

thought they would certainly suppurate, but they did not. Those cases with marked fever and a great deal of constitutional disturbance most frequently in my experience suppurate, sometimes deeply, and I have seen, contrary to the experience of the essayist, a number of these cases in children where I have had the glands opened, and pus was found. In those cases where suppuration had taken place, where fluctuation was detected, simple incision and washing out without poulticing was the plan of treatment followed; I did not believe poulticing was necessary to hasten suppuration, because generally when the gland suppurates and you can detect fluctuation there has been enough softening of the gland to empty it, and there is no reason to use poultices afterward.

The other class was where the mass would be enlarged for quite a long time, where the patient was built up, on the lines suggested in the paper, with fresh air, cod-liver oil, iodide of iron, etc., without local applications; still for some reason after a year or two we get an accession of the trouble, a fresh enlargement of the gland, with a little redness and fluctuation. By making an incision, then, you could squeeze out a thick caseous mass; these very frequently have a distinct cell wall, and when this is pulled out they heal nicely.

I believe the majority of these cases are tubercular, and that the glandular structures in this locality, as well as the bronchial glands, offer a certain amount of resistance to the invasion of the system by the tubercle bacillus, and I believe it is very bad practice to use any method, as common people call it, to "scatter or bring these glands to a head," and I have the greatest difficulty in preventing the painting of the glands with iodine, the rubbing on of ointments, the application of poultices of hog jowl, etc., by the people.

Where there is much tension and swelling in these cases, attended with a sharp febrile reaction, I have occasionally rubbed in gently an ointment of chloral hydrate and camphor with lanoline. Generally in these cases cold applications have done more good than any thing else.

Dr. H. H. Grant. I think, perhaps, the pathology of the condition under discussion has been pretty well explained by both Dr. Simpson and Dr. Marvin. The immense majority of these conditions are probably tubercular to a certain degree, even some of them much more virulently so than others; but all chronic irritations at least are attended by marked depression of the vital powers and considerable interference with the general health. Of course we leave out of consideration that

form of malignant glandular enlargement in which there are an immense number of glands involved all around the neck, in the axillæ, behind the shoulder blades, and along the clavicle, which is essentially a blood disease independent of tuberculosis. Also acute infections of the glands here, as elsewhere, are not included in this discussion.

I have seen two forms of these glandular enlargements described by Dr. Marvin, and I have seen, I think, even more frequently than intimated, the progressive enlargement of these glands until they have attained a very considerable size, with destruction of the gland, due partly to peri-adenitis and partly to degeneration of the gland itself. I have seen these glands get as large as a large goose egg, or larger even than that, in appearance at least, then break down as tubercular material, which we see in all these scrofulous or tuberculous conditions, which after curettment and packing heal up slowly by the process of granulation and gradually disappear. Some of these glands are very small, but others I have seen grow to a considerable size. Two instances I remember, both occurring in girls, where the process was very slow, yet the glands got very large; the suggestions for treatment that were made were very tedious to the family, and in both instances the process was perhaps extended over a period of eight or ten weeks before it appeared that it was necessary to interfere surgically.

In the small glands, where breaking-down occurs early, I think it is important to open freely, scrape out the broken-down tissue with a curette and pack with gauze, keeping the skin wound well open, and encourage granulation from the bottom. When the glands remain hard and show no tendency to break down, I think the treatment indicated by the gentlemen who have spoken is the proper one. I have in a number of instances, more perhaps with the view of doing something and satisfying the patient and the family, employed the ointment of oleate of mercury. I rarely use any thing sufficiently strong to irritate the skin, but merely with view of stimulating the gland itself to the absorption of the deposit. As long as the gland remains hard, and the patient is satisfied to continue treatment, I think surgical interference is not demanded. I scarcely think it is improper in these cases where the deformity is considerable, where the patient is annoyed by the presence of a tumor of this kind which it is desired to get rid of, to resort to surgery, and I can not say that I have ever seen such interference under these circumstances turn out unsatisfactorily. I have recently operated the third time on a young gentleman out of the city

for enlarged glands of the neck which successively recurred after the operation; or at least other glands, either in the immediate neighborhood or a little remote from the original wound, occasioned such inconvenience that he requested further operation. There was an interval of nearly three years between the first and last operations, the last being only a few weeks ago, in which I removed a gland just at the angle of the jaw which extended deeply down so as to lay the artery of the internal jugular vein bare. The gland was taken out intact and the wound healed by primary union, and the gentleman's condition at that time was fully as good as it was three years ago. There does not appear to be any disease of the lung or any extension elsewhere of the tuberculous material.

I think, then, the treatment of a condition of this kind is, wherever the gland has broken down it should be opened promptly and freely. No delay should be allowed, because these deposits when they once become fluid are not reabsorbed. In these cases simple incision and curettment is enough. Where the gland is indurated, I think it is perfectly proper to delay operative treatment unless requested by the patient or unless continued enlargement leads the surgeon to think that it would be well to get rid of the deformity or the annoyance and inconvenience caused the patient. Of course, complete removal, when possible, is to be preferred to incision.

The constitutional treatment, like the treatment of tuberculosis elsewhere, should be reconstructive and supportive; the nutrition of the patient should be improved in every possible way.

Dr. F. C. Wilson: It seems to me that wherever the glands are accessible, if clearly tubercular, they ought to be removed, though there be no great inflammation about them. If there is a history of infection, or the family history would make it most likely that they are tubercular, their removal seems to be suggested at any rate, if not imperative. Of course many of the deeper glands can not be reached, and they have to be allowed to remain, although we may wish we could remove them. These enlarged glands are a source of infection which menaces the whole system, and the indication is very clear to get rid of them if within reach.

Dr. A. M. Cartledge: Referring to the classification in the paper as to the varieties of enlarged glands of the neck, my experience differs a little with that of Dr. Marvin. I think most of the suppurative glands I see about the neck in children under ten years of age are not tuber-

cular; they are nearly all from pyogenic micro-organisms. Sometimes they are very slow in their development, possessing nearly all the characteristics of a secondary infection, a peri-adenitis and abscess, and they are opened as abscesses. I do not believe these are tubercular, and most of the cases I see in children under ten come in this category. Tubercular adenitis of the neck, I think, occurs, in the greatest majority of cases, from twelve to twenty-five years of age.

The subject is entirely too large to discuss from the standpoint of the various phases that the disease presents. It goes through the same stages as tuberculosis elsewhere; the tendency in all these cases is to caseation, as it is in tuberculosis elsewhere. Secondary infections do not occur very often. Where we have them suppurate or get red after long existence in the neck, it is evident that there is a secondary infection. In my experience they are recurring; the size of them is constantly changing, according to the standard of health of the patient; where during February, for instance, the glands are very much enlarged, and then when warm weather comes they almost disappear until the next winter. I have treated numbers of these cases in young girls and in young men where there will be a chain, an aggregation, of lymph nodes along the neck, especially during the winter season. In these cases the glands have not gotten to the point of caseation. Once a gland becomes caseous, it remains about the same size for a long time, and is not influenced by medicines. The cases you can help with the hypophosphites, cod-liver oil, and change of air are those where the glands are swollen and have distinct tubercular deposits in them, but which have not gone on to caseation. In my experience these are the glands that all the difficulty has come up about removing. I am quite sure that if you remove only half the gland in this inflammatory stage, that the condition is aggravated. Once a gland becomes caseous, the outer part of it near the capsule will show the tubercle bacillus under examination, and there is a distinct inflammatory zone; these glands had best be removed thoroughly, and if the infection is sufficiently pronounced even in the first stage, they ought to be removed. But operation is prone to make matters worse, because if you have the superficial layer of glands involved, the deeper layer almost certainly becomes infected; you remove only a part of them, and it is like breaking up a tuberculous joint, as Billroth, Virchow, and others have shown; by the trauma and manipulation consequent upon the operation you may cause dissemination of the tuberculous process

all over the body. It is the same way about partially removing a tuberculous gland. Once you have a caseous gland, however, that does not change its size, the gland ought to be removed, because it is undoubtedly a source of danger; cod-liver oil and other remedies will have no effect upon such a gland. Such glands simply act as store-houses, and if there is the least reduction in the vitality of the patient, there is a rapid dissemination of the process to other glands. The surgical rule should be, if you can remove all of a tuberculous focus, remove it like you would a cancerous process; if you can not remove it all, you had better let it alone, because by breaking it up you simply open new avenues of infection. I believe the breaking and bruising of these glands in an effort to scrape them out is bad surgery. I never curette glands of the neck. I dissect them out; I take out the gland, capsule, and every thing intact. I try never to break a gland in removing it. If you are not going to remove them thoroughly, it would be better to simply make an opening and allow nature to go on with the process of caseation, which is her method of curing the condition, and healing will oftentimes take place from the bottom. In removing these glands in the second stage, unless they are limited, the operation does not do much good, because other glands spring up in their place, and there is often a tuberculous focus in the lung at the same time. Certainly it is good surgery to entirely remove all diseased, caseous glands; remove the whole chain; make a large incision and give yourself plenty of room. Surgery should be employed here where you can remove all the disease, otherwise I think it is better, if the glands are not caseous, to treat them in a general way.

Dr. S. G. Dabney: We frequently see enlarged cervical glands associated with enlarged tonsils and adenoid growths, and, as many of us have noticed, in the last few years there has been much written about the tubercular character of enlarged tonsils and adenoids. Some French authorities particularly have claimed to have found the tubercle bacillus in tonsillar enlargements, but the prevalent opinion in this country is voiced by Wright, who stated that he was convinced only a small proportion of cases of tonsillar enlargements could be considered tubercular in character; that the tubercle bacillus, when found, was merely a coincidence. I have often been surprised at the comparative rarity of enlarged tonsils in the negro race, in whom we often see enlarged cervical and other glands. The danger of general infection

from these enlarged glands must be very slight, because we see many people go on from year to year and do not appear to get any worse. We see children every week with some enlarged cervical glands, and they do not develop general tuberculosis. They get well and remain so under the general reconstructive measures that have been mentioned. Another cause which we frequently see for enlarged glands is ear diseases. I have a case on hand now suggested to me by what Dr. Cartledge has said about the pyogenic origin of them. A young lady, aged twenty-two years, has chronic suppuration of the middle ear; just now she has an enormous enlarged gland just at the angle of the jaw, which evidently contains pus. She has hesitated about operative interference on account of the scar which might result. I suppose the scar left would be smaller and not so unsightly as the gland is now. This would seem to be a case of the pyogenic variety. A great many of the acute cases subside.

Dr. J. M. Ray: I was thinking while the discussion was in progress that if all cases of enlarged glands of the neck that we see were tubercular, then we certainly see a great many cases of tuberculosis which get well, because it is almost a daily occurrence that we see one or more of these cases. I saw one to-day, a large, healthy looking man with a number of enlarged glands about his neck. We constantly see such cases in children, the so-called strumous or scrofulous children who present with phlyctenular eye disease. It is my experience that nearly all of them get well. The condition is no uncommon occurrence in connection with enlarged tonsils, and I have in several instances found that they rapidly subside after removal of the enlarged tonsil, showing the local origin of the infection by some pyogenic micro-organism perhaps. Like Dr. Dabney, I have under my charge now a young woman with an acute double suppurative inflammation of the middle ear in which a large cervical gland developed with the development of the inflammation of the middle ear.

With reference to removal of the gland and the possibility of general infection after removal, it has been my experience to encounter two cases where infection occurred. One was a young man and the other a young married woman. Both had been operated upon, one upon both sides, in which a large quantity of these glands had been removed, and later on they developed tubercular laryngitis.

Another feature that may be of some importance is that cases developing in middle life, between the ages of twenty and thirty, are

apparently much more suspicious than those which occur in childhood. When they develop after fifty, sarcoma should be suspected. I have under treatment at present a case allied to those under discussion which throws some light upon the etiology of certain eye affections, especially about the choroid. The patient is a young woman, thirty years of age, whom I first saw seven or eight years ago with a few enlarged glands about the neck; one of them suppurated and broke down, leaving a small scar. Recently she developed an acute choroiditis in one eye, and came to me with an active inflammation going on, the vitreous being filled with floating bodies so that I was unable to outline the area of inflammation in the choroid. Under treatment, constitutional and local, the vitreous cleared up to a certain extent, allowing an ophthalmoscopic examination, which showed the area of choroidal involvement. The vitreous cleared up almost entirely, and just about the time I discharged her she began to develop other glandular enlargements, and now she has an enormous quantity of enlarged glands in the neck, which causes great disfigurement. Some of the members of her family have died of tuberculosis, and it seems that possibly it is a tubercular condition, and it emphasizes the fact that a great many, perhaps the majority, of acute choroidal inflammations are tubercular in origin. The question has been discussed rather extensively during the last few years, and some authorities maintain that many choroidal inflammations are tubercular, and others take the opposite view. There is no question that we encounter a great many choroidal inflammations where we can not get at the etiology of them. Choroiditis sometimes develops in strong, healthy people where there is nothing in the history of the case which points to the etiology. I saw, some months ago, a healthy, well-developed man who came directly from New York. He was in Louisville on a visit, and while here had an exacerbation of an eye trouble, and his relatives sent him to me. He said that a doctor informed him that the inflammation in his eye was tubercular, though there is absolutely no history which points toward tuberculosis in the family.

Dr. J. G. Cecil: Notwithstanding the authorities are generally united in saying that tuberculosis has a special predilection for glandular structures in children, my own experience would rather lead me to believe to the contrary as far as tubercular adenitis of the cervical glands is concerned. All of us see a great many cases of swollen glands in the necks of children, but when we investigate the cases

thoroughly we generally find some other cause than tuberculosis—the majority of them are probably due to scarlet fever, diphtheria, dental caries, ear diseases, throat diseases, nose diseases, or something of this kind, and a careful investigation will clear up many cases. Another feature is that so many of these cases get well without any special treatment that I am disposed to believe that tubercular adenitis is not so common in children as authorities would lead us to believe. It seems to me, as I recall cases I have seen in my practice, that I have very seldom seen a case that I could positively make out as tubercular. Certainly in my practice the greater number of them are of septic or pyogenic origin. I have recently seen a case that was in some respects peculiar and interesting to me in a young woman who had what was said to be tubercular adenitis during her teens. The glands became tremendously enlarged, but as far as I know they did not break down. A large number of the enlarged glands were removed by a surgeon in this city, and apparently very successfully removed, and she made a good recovery. She married, and during the first year of her married life many other enlarged glands appeared not only in the neck but elsewhere, some of them getting very red and tender, but they were non-suppurative. She consulted me with reference to their removal. I advised against it. She bore a child a year ago, going through her labor successfully. Her husband shortly became very ill, and she nursed him through a severe attack of illness; and while nursing him, and her child in addition, she had an attack of grip last February. After her husband recovered from his illness they went South. I examined her at that time with reference to the lung trouble, she having had a cough during the attack of grip which had persisted. I could find no evidence of a deposit in the lung, but she was very much run down in general health. They went to Pass Christian, Mississippi, and remained for a month or two. She was brought back here a short time afterward in a very pitiable condition. Another physician was called to see her, and I understand that she then had general tuberculosis, and died a short time ago.

Here is a case that seems to have run the whole gamut, having had, so far as I am aware, no family history to lead one to believe the original trouble was tubercular, yet it undoubtedly must have been, from the subsequent history of the case, as she died from general tuberculosis; it was a case in which operation for removal of the enlarged glands was apparently successful at first, afterward proven not to have

been, because of reproduction of the glands in great numbers upon both sides of the neck and down the clavicle on both sides. The result in this case has led me to believe that the less operative interference with these enlarged glands the better it will be, unless there is a very plain indication and the gland can be totally removed; unless this can be done, it would be far better to simply open it if suppuration has occurred, and then let it take its chances. I do not believe much good can come from opening a number of the glands and removing only portions of them, then leaving others to become enlarged or spring up in other places. It seems to me it would be far better to let such cases alone.

I do not know whether my experience differs from others or not, but it seems to me there are much fewer of these cases that are tubercular than there are of other origin; and certainly my experience in the non-interfering plan has been quite satisfactory, so much so that I would not feel disposed to try to improve it by interfering very materially.

As far as treatment goes, I have been disposed to direct very little treatment to the gland itself. I sometimes use an ointment in the shape of a placebo, a mild mercurial, or a compound iodide ointment, with little hope that it will accomplish much good. I prefer to build up the patient as far as practicable in a general way and trust to nature for a cure.

Dr. J. E. Hays: My experience with enlarged cervical glands has been very much like that of Dr. Cartledge, viz: where they are found in early manhood or early womanhood they are more indicative of tuberculosis than when they are encountered in earlier life. In adults glandular enlargement is often the forerunner of tuberculosis elsewhere. In childhood a great many enlarged cervical glands run a more or less chronic course, and will subside under ordinary internal and local treatment; but what I wish to ask particularly is this: Where we have the development of enlarged cervical glands in childhood or early life, apart from any manifestations in the lung or elsewhere, can we determine positively whether these glands are tubercular or not, and by what means can we do so?

Dr. F. C. Simpson: In answer to Dr. Hays, the only way to determine whether these glands are tubercular or not is to obtain the history of an inherited predisposition on the part of the patient. In so far as the enormous glands you find enlarged in the neck, it does not follow

that they are all tubercular; we have the same disturbance from nasopharyngeal troubles, disease of the tonsils, etc., so it must not be presumed that they are all tubercular in character. Acute enlargements of the cervical and other glands often occur, especially during the winter and spring months, from other causes than tuberculosis; those that partake more of a tubercular nature are the chronic ones. Those not tubercular in origin may be acute or subacute, and may subside after a month or two. Take a gland that continues to be enlarged, one which reaches a considerable size and then remains stationary, this is the gland which I take to be tubercular. As Dr. Cartledge has said, operation is demanded where the gland has become caseous and shows a tendency to break down. No good can be accomplished by an operation which is so extensive as to contemplate taking out all these glands. You may get out those that are superficial, but the deeper ones will spring up, and the patient will be in a worse condition than before the operation.

So far as enlarged glands in children are concerned, I have had cases under observation for months at a time and watched the development of the glands and also watched the condition of the little patients carefully for evidences of tuberculosis. These children are in the Masonic Home, and many of them have a distinct history of tuberculosis in the father and mother, but I believe in the majority of them the glands have gradually subsided. Of course, what the final outcome will be I am unable to say. The glands may spring up again, and the patients may develop general tuberculosis. Certainly the gland that is tubercular is the one that runs over a considerable period of time, and may change its character several times.

You will find that the majority of enlarged glands of adolescence show a tendency to break down; they go on and suppurate and open spontaneously, or it is necessary to puncture them. I think to make a free opening without curetting is the best treatment. I do not believe it is a good idea to curette these glands, because you may get down to deeper tissues and excite there other glands to spring up. In my experience in the last two or three years I have had several cases where these glands have been drained thoroughly, and the patients now seem to be in perfect health. I have a case in mind now where a girl had quite a number of glands enlarged; some of the glands were beginning to break down, while others had suppurated and were healing. She has now three enlarged glands under the arm; they are not very large,

and are not giving her any particular trouble. She recently came to me for advice as to whether she should have them operated upon. I advised against it. I remember another similar case. One of the cervical glands suppurated; the axillary glands became involved; they were not very large and never gave much trouble except that she knew the enlarged glands were there. The young lady is seventeen years of age, and if operated upon she would probably be in worse condition than at present. There is no evidence of tuberculosis elsewhere.

Infection from Tuberculosis. Dr. Frank C. Wilson: A gentleman came to my office to-day for examination. In questioning him as to his history, I found he was a cigarmaker. He lost a brother, who died of tuberculosis, also a cigarmaker, with whom he worked until about six months ago. He had to nurse the brother for three or four years, and worked in the same room with him long before this time.

The question naturally arises as to the dissemination of infectious material by means of cigars. I can recall numbers of instances where cigarmakers became the subject of tuberculosis, and in questioning this man as to what care was taken of the sputum, I found that none at all was taken. Both these men worked in the room together, and probably there were other cigarmakers in the same room, the expectorating was probably done upon the floor, and in sweeping dust from the floor settled upon the tobacco, or they may have pursued the old plan of moistening the end of the cigar with saliva, and in either event you can realize what risk is run of disseminating the disease.

Two Cases of Appendicitis. Dr. A. M. Cartledge: I will briefly report two rather unusual cases of appendicitis that I have recently seen. One was the first case of obliterative appendicitis that I have seen. The man was operated upon during the interval between the third and fourth attack. The specimen shows a perfect example of obliterative appendicitis. The man was operated upon six weeks ago, and has done perfectly well since the operation.

Three weeks ago I was called to see a young woman in acute intestinal obstruction which started in on Thursday morning at five o'clock. She was first taken with rather severe pain in the abdomen; a physician was called and worked with her all day Thursday, then on Friday morning she had decided symptoms of intestinal obstruction. When I saw her Friday night she was vomiting, more or less typical of obstruc-

tion. I had her sent to the Norton Infirmary and operated. Making a small incision and inserting my finger into the cavity, I found what I took to be a band of adhesions encircling the small intestine. It was later shown to be the appendix attached to the ileum about three inches from the ileo-cecal valve, attached at about the distal one inch of its extremity, making a loop. Through this was a coil of the small intestine which had become black and strangulated. This was released and the appendix removed in the usual way, the woman making a short and rapid convalescence. The woman nor the physician who attended her did not know there had been an appendicitis, although the specimen shows distinct inflammatory action. The woman said she had been treated in several attacks of what was called intestinal indigestion, but they were not of such a character as would have led one to suspect that she had appendicitis.

THOS. L. BUTLER, M. D., *Secretary.*

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Abstracts and Selections.

THE COMPARATIVE DIETETIC VALUE OF WHITE AND WHOLEMEAL BREAD.—It is commonly supposed that wholemeal bread is more nourishing than ordinary white bread because it contains a higher proportion of nitrogenous and mineral substances. But, as we have frequently pointed out, the nitrogenous value of a given food is not necessarily indicated by an empirical chemical analysis. Not all nitrogenous substances are feeding stuffs, and further, it does not follow that the quantity of food partaken of is the quantity of food assimilated. In other words, eating is not necessarily feeding. There are many substances containing a very high proportion of nitrogen which are valueless as foodstuffs, and on the contrary there are many edible materials which contain a comparatively small proportion of nitrogenous substances, which, however, are completely available for nourishing the organism. We now know that it is not enough for chemical analysis to record merely the proportion of nitrogenous substances; the nature of these substances must be declared, without which the food value of a given substance can not be estimated. It was formerly assumed that wholemeal bread contained more nitrogen than white bread, but in the light of recent analyses this is not true. Whether or not, however, wholemeal bread is superior as regards its nitrogenous contents, it is certainly inferior as regards its digestibility. This may be attributed, in

a large measure, to the fact that wholemeal bread contains comparatively large, indigestible, and irritating particles of husk. There seems, however, no reason for doubting that wholemeal bread would be much more digestible if the branny particles were finely comminuted. In several patent breads the germ of the wheat is retained, which adds considerably to the nitrogenous value of the bread. But the germ of wheat tends to excite fermentative changes in the "sponge" and produce an unpalatable loaf. Several processes, however, have been devised which avert the possibility of this undesirable effect. We do not believe that with the improvements in machinery generally the dietetic value of bread has *pari passu* increased. We still hold that a more nourishing article, as it is certainly more palatable, is the old-fashioned farmhouse loaf which presents a gold wheaten color rather than the blanched appearance which seems to be looked upon as a guarantee of quality in the modern white loaf. Our own laboratory experience, at any rate, shows that probably on account of the increased employment of roller-milling processes the important mineral constituents of white bread have very materially diminished. When it is considered that these constituents play a not unimportant part in supplying the bone-forming factors of the organism, this fact assumes a serious importance, and may even throw light upon the prevalence of dental decay. On the other hand, wholemeal bread and germ bread contain an enhanced proportion of mineral salts, such as the phosphates of lime and potash, which are necessary in the building up of the entire human frame.—*The Lancet*.

THE PERIPHERAL MOTOR NERVES AND THEIR ACTIONS.—In the interesting address delivered by Dr. Langley to the Physiological Section of the British Association for the Advancement of Science, and published in our present issue, several debatable points of nerve physiology were discussed, and, as the author admitted at the outset, none of the general conclusions which he advanced are generally accepted. It must be acknowledged that, familiar as we are with many of the more conspicuous phenomena of life, our attempts to furnish an explanation of the intimate nature of nerve action are lamentably defective. We find, for example, that a stimulus applied to one nerve is followed by the contraction of a muscle, but applied to another it is followed by the relaxation of the same muscle, and we call the effect "motor" in the one case and "inhibitory" in the other, and fancy we understand the process in each case. But in reality we do not as yet comprehend the nature of nerve action at all. We do not know whether the transmission of an impulse is a wave of molecular or chemical action, or whether it resembles light or electricity in its mode of propagation. That the influence of the nervous system on the body is far-reaching there can be no doubt, but Dr. Langley believes that we are perhaps apt to overestimate the character and range of that influence. Many and large portions of the organism, he thinks, live their own lives uninfluenced except indirectly by the storms and stresses of the central nervous system. No

nervous impulse can pass to them to make them contract or to make them secrete, or to quicken or to slacken their inherent activity. Nevertheless, even in these cases the nervous system may influence them by changing the quantity or quality of the surrounding fluid. The essential effect of a nerve impulse appears to be to modify the amount of energy set free as work; usually it causes work to be done, as in the contraction of a muscle, or in the secretion of fluid by a gland, while sometimes it diminishes the work done, as in the cessation of a heart-beat, or the decrease of contraction by a blood-vessel. It seems probable that the supply of efferent nerves, even to such organs as muscles and glands, varies to a very considerable extent, and the development of inhibitory fibers Dr. Langley believes to be comparatively small. A second point that was taken into consideration was the nature and powers of reflex action. Dr. Langley briefly stated the view generally accepted, to the effect that the peripheral ganglia receive impulses direct from the periphery, and that each ganglion is connected with others, so that many ganglia can be brought into co-ordinate action; but in opposition to this view it may be remarked that various instances have been observed where the nerve-cells of one ganglion have no connection with the nerve-cells of another ganglion, so that such a scheme can not be regarded as of constant occurrence. Instead of this, and as a working hypothesis, Dr. Langley advances the view that the real working mechanism of the peripheral ganglia consists primarily of a cell in the spinal cord which branches, each branch ending in a single cell. Each of these nerve-cells sends off a nerve fiber which branches, the branches ending in a group of involuntary muscle or gland cells. A reservation must be made of the plexuses of Meissner and Auerbach in the walls of the intestines, which Dr. Langley regards as of a different nature from the peripheral ganglia generally. He makes the suggestive remark that all the tissues of the body may be looked upon as engaged in a life-long process of carrying out experiments, and it is not unlikely that there are in the body what may be spoken of as the residues of these natural physiological experiments, either the beginning of experiments which have failed or the melancholy ends of those which, once partially successful, have subsequently failed. The last subject taken up by Dr. Langley was the subject of specific nerve energy in the involuntary nervous system, and he gives as his conclusion, drawn from observation, that the different classes of nerve-fibers and nerve-cells of this part of the nervous system do not possess those deep and inherent differences in their functional activity which are required by the theory of specific nerve energy.—*Ibid.*

ANOTHER "NEW" CURE FOR CONSUMPTION.—Dr. Carlo Ruata, Professor of Materia Medica and Pharmacology in the University of Perugia, has, according to the Rome correspondent of the *Lancet*, a new cure for consumption. At a meeting of the Umbrian Medical Congress Professor Ruata explained his "cure," as the correspondent says, to a large and

sympathetic if not a wholly convinced audience. Briefly stated, it consists in the graduated continuous inhalation of alcohol, creosote, and chloroform. Eleven typical cases of pronounced tuberculosis were perfectly cured. Out of another series of cases, 32 in number, in 22 the progress of the disease was so arrested as to put them out of danger. The Congress expressed satisfaction at the report, and, while reserving judgment, congratulated Dr. Ruata on having devised a new line of treatment, "which has only to be developed, if in some respects modified, to give it what Baccelli called the rights of citizenship in clinical medicine." If we mistake not, what Dr. Ruata recommends as a new method has been used in this country for several years.—*Journal American Medical Association.*

GOLF AS A THERAPEUTIC AGENT.—Possibly our enthusiasm for golf has overreached itself. This, at least, would appear to be the opinion of the Medical Press, from which we quote the following :

"It has been said that every other man in America is now so addicted to Scotch ways and habits that he wears heather-tweeds, play golf, drinks 'Scotch,' and says 'Hoots, mon.' Of such must be Dr. Irving C. Rosse, Washington, who contributed to the American Neurological Association a paper on golf from a neurological viewpoint. Medical men have their hobbies in sports and pastimes, and these are sometimes regarded with a professional eye and with a bias in their favor which is largely due to the man's own aptitude and predilections. We are told that here we have a royal road to physical exhilaration in a game that can be played all the year round, independently of atmospheric vicissitudes, during all the seven ages of man, by delicate young girls as well as by strong athletes, and even by decrepit old men whose declining powers do not admit of severe exertion. We must, however, dissent from the statement that there is absolutely no danger attached to the game, and that consequently no accidents ensue. Dr. Rosse is evidently new to the game and knows little of its history, even its latest history, or he would know that fatal accidents have occurred, at least in Scotland, from golf-ball strokes.

"There is a great deal to be said in favor of golf for those suffering from heart lesions, arterial calcification or certain hysterical conditions, and undoubtedly as a medical adjunct it is not to be despised. Dr. Rosse, while enjoining moderation, alleges that benefit has been derived in some cases of cough, nervous asthma, and in affections of the bladder and prostate; but it is pre-eminently in functional nervous disease that our great Anglo-Saxon game is to be recommended both as a prophylactic and curative. As to its being a certain remedy for insomnia there may be some doubt, as we have met, within the last few days on the golf course, a golfer who despite his golf exercise suffered from insomnia. A great deal might be said in favor of golf as a mental and nervous tonic, but not to the exclusion of other sports which have many of the same advantages. Undoubtedly it is a good thing for the physician to know from his own actual experience the

physical requirements of different games and their physiological uses. The use of golf as a remedy in the treatment of nervous ailments of a functional character, whether they affect the mental or visceral spheres, is worthy of all consideration."—*Boston Medical and Surgical Journal*.

VENEREAL DISEASES IN VARIOUS ARMIES.—The only statistics available at the Brussels Conference, that were at all reliable, were those treating of venereal diseases in the army; the number of men admitted to the hospitals for this cause. According to Sem. Med., September 30th, Great Britain heads the list, with 194.6 per 1000 in England and 522.3 in India (1897); Italy, 90 per 1000; the Netherlands, 100 per 1000 in 1890 and 44.7 in 1897, including 6.5 as the proportion of syphilis; Russia, 36.1 per 1000, including 12 per 1000 cases of syphilis (1895); France, 51.6 per 1000, including 8.9 syphilis, in 1895, gradually decreasing to 37.5, including 7.8 per 1000 syphilis in 1895; Germany, 29.9 per 1000 in 1894, 25.5 in 1895-6. The peculiar benignity of syphilitic infection in China was mentioned by Blanc of Shanghai: "by the end of six months it is apparently all finished." The only severe cases he encounters are those contracted in Europe or America.—*Journal American Medical Association*.

UPON THE USE OF ETHYL CHLORIDES AS ANESTHETIC.—Army Surgeon J. Wiesner, M. D., of the K. and K. Infantry Regiment, No. 67: Being at the head of the Innsbruck Surgical Clinic of Professor Hecker from October, 1898, in which clinic, as is well known, a systematic practice of the anesthesia by means of ethyl chloride was first undertaken, I had ample opportunities of observing the application of this anesthetic, as I had as material for my observations upward of four hundred operations which were effected there. I was quite amazed to see the rapid effect of the anesthetic, and the equally rapid recovery of consciousness as soon as the mask was withdrawn from the face. These advantages gave me the idea of the possibility of applying this anesthesia to operations on the field of battle.

The publication of this memoir appears to me to be justified by the fact that the question of anesthesia is always one of the greatest interest to each surgeon, and it appears to me greatly to be desired that experiments should be made with this anesthesia by properly qualified army doctors.

Ethyl chloride (chlor-ethyl), monochlorethan, ethylum chloratum C_2H_5Cl , the kelene of the French house Gaillard, Monnet & Cartier, is an extremely fluid liquid of a strong, ether-like special odor; it boils at the low degree of 12.5 C., and any particular part of the body can be cooled with it to 35° C.

In regard to the technics and execution of the anesthesia with ethyl chloride: As the above-cited clinic has employed the term *kelene anesthesia*, I will use the same term myself. Directions are given in the corresponding papers of this clinic (2) and of certain dentists (3). I will confine myself here to giving the results of my own observations: In one half to two minutes (according to the age of the patient, or whether they have

been accustomed to large doses of alcohol) the anesthesia is complete. I have even heard persons under the influence of the anesthetic answer questions without having the slightest recollection, on recovering consciousness, of the conversation they have taken part in. I have observed a period of excitement only in alcoholic patients, and even then not generally in a high degree. Only in one case was an anesthesia impossible on account of the excitement. Never did feebleness of the heart, falling back of the tongue, difficult respiration, with its consequent asphyxia, present themselves.

If a disagreeable awakening of the patient occurred during an operation, it was always due to the fault of the doctors entrusted with the execution of the anesthesia. With the withdrawal of the mask consciousness returned immediately, and I have seen out-patients go home alone unaided after the completion of the operation. The patients complained of headaches occasionally. I have never known, except in children, a complete diminution of the muscular reflexes. There is no complete relaxation of the muscles, and for such operations as require this the anesthesia with kelene is undesirable. Nevertheless, the diminution of the muscular tension is sufficient to arrange even severe luxations, or, in fractures of the patella, to enable the widely separated parts to be brought together.

In Professor Hecker's clinic the kelene anesthesia is employed for operations of a short duration, and whenever it does not seem advisable to use chloroform or ether, as in high degree of interruption of the circulation, fatty degeneration of the heart, disease of the respiratory organs, cachectic persons enfeebled by a great loss of blood and suffering from nervous shock. In these cases it is necessary to work very rapidly, and the Schleich infiltration can not therefore be employed. Recently the kelene anesthesia was employed for operations of a longer duration—as much as fifty minutes—without any bad effects whatever resulting.

In none of the two hundred cases which came under my own observation does there appear to have been any bad appearance, accidents, or results. Vomiting was also very rare. In the same way certain patients which had been narcotized several times showed no such repugnance to the kelene anesthesia as is the case with chloroform or ether patients. If I recapitulate briefly the advantages of the kelene anesthesia, rapid action of the anesthetic, absence or short duration of the period of excitement, immediate return to consciousness, and the possibility of employing it for persons enfeebled by excessive loss of blood or by shock, and put against these disadvantages absence of complete relaxation of the muscles and unsuitability for operations of long duration owing to the easy awakening of the patient from the insensibility, there is a certain balance which speaks in favor of the kelene and seems to justify its application on the field of action.

The regulations for the sanitary service of the K. and K. army, Part IV, says in Article 133: "In general, the chief task of the ambulance staff on the field is to prevent dangerous conditions from developing, and to get the

wounded ready for transportation as quickly as possible." We shall thus be enabled in the ambulance department, as well as in other places, to undertake trepanning for fractured skull, tying up bleeding and ruptured vessels, amputations of crushed limbs, and tracheotomy. Soldiers who are wounded in this manner can not be kept waiting until they arrive at the hospital, even if they could be transported in such a condition.

Habart has called attention to the immense importance of rapidly transporting the wounded. He says: "It is my opinion that the fate of the wounded to-day is decided not by the first dressing, but by the first transportation." The wounded should, therefore, be operated on immediately, partly on account of the great danger to life in delay, and partly to get them ready for transportation; and this should be done, if possible, under anesthetic. Now, anesthesia by chloroform requires fifteen minutes for its accomplishment, and ether even more. The loss of time involved in the use of these anesthetics is fatal, owing to the great affluence of the wounded who are waiting for treatment, and to the comparatively small number of doctors at their disposal. We must also remember wounded who are suffering from the effects of a great loss of blood, or the great fatigue and privations inseparable from the campaign, and who would probably succumb under the additional shock of the chloroform. Besides all this, those who have been under the influence of chloroform or ether are not fit for transport from the field for some hours, as repose and surveillance by the doctor are absolutely indispensable for them, the reflex only returning later on.

I believe that I have demonstrated that by using the ethyl chloride anesthetic all these inconveniences are avoided, and that we can save time and avoid the danger of accidents and bad after-effects, while the wounded have the great advantage of being ready for transport immediately after the operation is finished.—*New England Medical Monthly*.

UNUSUAL COMPLICATIONS OF TYPHOID FEVER.—Dr. E. B. Montgomery, Quincy, Ill., presented a paper of considerable interest on "Typhoid Fever in Very Young Children, with a Report of Three Cases with Unusual Complications," which was read before the Mississippi Valley Medical Association, October 4-6, 1899.

After an extensive review of the literature pertaining to typhoid fever as occurring in infancy and childhood, including a mention of Dr. Stowell's tabulation of eighty-five cases under three years of age, the author detailed three cases—two of which happened in his own practice.

In the first, an infant of nine months, the meningeal symptoms were so marked as, for the time, to make a diagnosis of tubercular meningitis highly probable. These symptoms began to subside about the twenty-third day of the fever, and convalescence was fairly established by the thirty-fifth day.

The second patient, a little girl of three and a half years, suffered from the development of double suppurative parotitis about the twenty-fifth day

of the fever, and aphasia from an earlier period. The fever persisted for some time after the evacuation and drainage of both abscesses, but convalescence was finally fairly established about the forty-fourth day from the onset of the illness.

The literature pertaining to meningitis and parotitis as complications of typhoid fever was reviewed, and many statistics, showing their comparative infrequency, were given.

The third case, an unreported case of Dr. C. W. Rook, of Quincy, Ill., occurred in a boy of three years, and was unusual in the development of swelling of submaxillary glands of one side on the seventeenth day of the fever. Later this suppurated and the pus was evacuated; and one week following a parotid abscess formed, resulting in the death of the patient on the thirty-third day of the illness. The author, in an extensive search of the literature pertaining to typhoid fever, its complications and sequels, was unable to find but three other cases detailed in which the submaxillaries became involved in the course of the disease.—*Virginia Medical Semi-Monthly*.

LIMITS OF VENTRO-FIXATION OF UTERUS.—During the session of the American Association of Obstetricians and Gynecologists, held at Indianapolis, Ind., September 19–21, 1899, Dr. X. C. Werder, of Pittsburgh, Pa., read a paper entitled "Two Cases of Dystocia Due to Ventro-Fixation: One Requiring Cesarean Section." In this paper he reported five cases of firm ventro-fixation followed by delivery at term. In two cases dystocia followed this operation done for complete prolapse of the uterus with inversion of the vagina. One case terminated spontaneously; the other required Cesarean section. The former case had been operated upon by himself, the latter by another surgeon. In both cases a series of operations was done at one sitting, including curettement, amputation of cervix, anterior colporrhaphy, ventro-fixation, and perineorrhaphy. In his own case very firm fixation of the fundus and posterior wall of the uterus to the abdominal wall was made in order to be sure of relieving prolapse. In the other case infection is said to have been the cause of broad attachment and firm fixation.

He excludes from discussion other procedures intended to hold the uterus in anterior position, and defines the limits of ventro-fixation as follows: It is the operation of preference in cases of complete prolapse of the pelvic organs, and in cases in which a very large heavy uterus, due to chronic metritis, is habitually retroverted or retroflexed and causes pronounced symptoms. In these cases he thinks less rigid fixation is ineffective. The fixation should be between the anterior uterine wall—not the fundus or posterior wall—and lower angle of wound. He attributes the serious after-results to errors in technique rather than to the procedure itself.—*Ibid*.

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MAN'S RIGHT TO DIE.

Mr. Simeon Baldwin, of the American Bar Association, delivered an address at its annual meeting in which he claimed that a man had a right to do as he pleased with his life. The object of the address was to show that when a person is fatally ill it is humane to hasten death; that is, after it is certain that recovery can not take place.

This seems to be a charitable and logical view of the subject, as it apparently ends a fellow-being's sufferings; but do we know that it does? We certainly do not, and for that reason, if no other, nature should be permitted to run her course. A man has no other right to his body than to use it for the purposes for which it was made, and to preserve it and sustain it.

From the very beginning of life, which is at the impregnation of the ovum, until all vitality has left that ovum or its resultant growth—which may or may not be a mature body—its destruction would be a violation of the fifth commandment; it would be murder. The God that created man's body and placed an immortal soul in it also made positive conditions as to what the body should do, viz: Love, serve, honor, and obey its Master and Maker. No man has a right to shorten or terminate the life of any human being under any circumstances, hence the argument of Mr. Baldwin is fallacious, and would be unworthy

of any consideration were it not for the fact that in our rapid advances in civilization some of us at least might retrograde by falling into barbaric practices by willfully terminating the lives of those that are entrusted to our care. The practice of destroying the diseased and decrepit is an old one among the uncivilized races, and is still practiced by certain tribes. They have various ways of disposing of those that are supposed to be useless or not able to recover from an illness. One way is to neglect them by not giving them any attention, food, or drink; another is to bury them alive.

Whether they really wish to see the sufferings of their friends ended and consider their death as humanitarian or not is not certain, nor does it matter; the lives of their friends are thus terminated.

The willful administration of a lethal dose of morphia would do the same thing, and that is virtually what Mr. Baldwin recommended. There is no difference whatever between the practice of savages referred to above and that advised by Mr. Baldwin. It is murder in either case. Mr. Baldwin stepped over the boundary line and demonstrated very clearly that his doctrine is unchristian and in every way in defiance of all of the laws of God.

Notes and Queries.

DR. WILLIAM H. HOWELL, professor of physiology at the Johns Hopkins University, has been made dean of the medical school. He is not superintendent of the Johns Hopkins Hospital, as has been reported, but Dr. Henry M. Hurd continues to hold that position.—*Maryland Medical Journal*.

TWO CENTENARIANS.—Martha Harlow died in Brooklyn on October 1st at the reputed age of one hundred and four years. She was born in Plainfield, Conn. Mrs. Ellen Graham Massvel, a cousin of John Lorimer Graham, who was postmaster of New York City during President Tyler's administration, died at Lakewood, N. J., on October 3d, aged one hundred and one years.—*Boston Medical and Surgical Journal*.

REV. H. A. SLAUGHTER, two months ago a Baptist preacher in St. Joseph, Mo., is now president of the National School (Medical) of "Neropathy." His credentials represent a six weeks' course under the "celebrated magnetic healer," Weltmer, of Missouri. The course in neropathy covers from two to four weeks. Instruction is given during the day, in the evening, or by mail, for \$100. A diploma is given, and, according to the laws of

Missouri, is good and valid. The name of the school is new, the branches taught are unknown, but the term "neropathy" seems not inappropriate for irregulars.—*Journal American Medical Association.*

A NEW ASSOCIATION.—The annual meeting of the National Hay Fever Association has recently taken place at Bethlehem, N. H. The main business of the meeting was the narration of the various experiences of the members, who represented every part of the country. Misery clearly loves company.—*Boston Medical and Surgical Journal.*

THE University of Chicago has a new and unique branch in the Chicago Physiological School for the training of nervous and backward children. It is said to be the first of its kind in the world, and is intended as a home for boys and girls who are unable to cope with normal children owing to illness or infirmity.—*Maryland Medical Journal.*

A NEW DANGER.—An affection is said to have appeared in Paris due to the presence in bakers' bread of salts of lead deposited on the walls of ovens by the use of old wood as fuel. The Council of Hygiene explains that such wood is usually impregnated with sulphate of copper or creosote, and is likely to give off poisonous volatile salts.—*Boston Medical and Surgical Journal.*

EVANGELIST D. L. MOODY ON PHYSICIANS.—Mr. Moody has the name of getting off a lot of good sense in his sermons. He believes in a practical religion; in a religion of truth and self-sacrifice; in a religion of noble aspirations and noble deeds; in a religion that elevates the individual, the community, and the nation in every way that is good. During the past week one of his alleged co-workers acknowledged having endorsed the notorious Dowie, and not only this, but did not deny that he had allowed one of his children to die of diphtheria without calling in a physician. In one of his sermons Mr. Moody took occasion to let this alleged co-worker know that the saving of souls and the healing of the body were two entirely different propositions, and among other things he said: "I do not believe that doctors are devils. The noblest profession outside of the ministry is that of medicine. Never yet in all my years of work have I called upon an able doctor, telling him of the sickness and need of some poor friendless person, that he did not at once go to the rescue, without money and without price. Some of the noblest men I ever knew have gone out as medical missionaries, devoting their lives to doing good with the skill and healing medicines the Lord has conferred upon them. And these men are called devils! God have mercy upon the man who says so—God forgive the man who holds such beliefs! God heals, and God heals through doctors and through medicines. Do not be carried away by the ravings of fanaticism. We have a new 'ism' in America about every year—beware of the 'isms!' What would I do if I fell sick? Get the best doctor in Chicago, trust

to him, and trust to the Lord to work through him! The doctors have done wonders as their knowledge has grown—they have reduced the dangers of death from diseases that once slew all they touched—and the doctors, if God helps them, will yet find a way to stop the ravages of other terrors!"—*Journal American Medical Association.*

TWO CASES OF TETANUS.—The death of a patient at the Boston City Hospital is reported. The disease was caused through a penetrating wound of a foot by a rusty nail. A second patient recovered. Both received antitoxin treatment.—*Boston Medical and Surgical Journal.*

EFFECT OF EMOTION ON THE LIVER.—Jonathan Hutchinson says that it has often struck him that we may perhaps infer from what is so easily observed in the case of the salivary glands as to what may not improbably be possible in that of such glands as the pancreas and even the liver itself. We know how easily certain kinds of emotion may cause the mouth to become dry and the salivary glands to cease their secretion for a time. We know also that in some persons the arrest of secretion may be permanent, and that probably in many more a partial arrest may become more or less habitual to the individual. If similar occurrences are possible in the liver, we have an easy explanation of the phenomena of bilious disturbances with or without jaundice.—*Medical Record.*

DEATH OF A CENTENARIAN.—It is reported that Mrs. Sallie B. Jennings, of New Fairfield, Conn., died last week, aged one hundred and two years. She was in excellent health up to a short time before her death.—*Boston Medical and Surgical Journal.*

SUDDEN CHANGING OF COLOR OF HAIR.—M. Schmidt, of Frankfort, reports in Virchow's Archiv., Vol. 156, No. 1, 1899, a case of sudden turning of the hair to gray. The patient was a laborer thirty-six years of age, who at the time was suffering from some affection of the neck. His hair showed two white patches, one in the middle line of the head, the other over the right ear. Eight years previously the patient had had a severe mental shock while on a railroad journey, and it was noted by his friends and relatives that these patches appeared almost immediately after. The possibility of its having been a congenital or gradually acquired defect, covered by hair dye, as has frequently been shown, seemed remote.—*Medical Record.*

A HISTORICAL CORRECTION IN CONNECTION WITH THE NAME, "KOPLIK'S EARLY SYMPTOMS OF MEASLES."—In the Medical Record of the year 1898, No. 1431, the well-known American pediatricist, Koplik, described an early symptom of measles, under the title of "A New Diagnostic Sign of Measles." It consists in the appearance of minute bluish-white specks on a bright red ground. These spots are found on the mucous membrane of the cheeks and lips twenty-four to forty-eight hours before the breaking out of the exanthema, and can be seen only with a

strong light. This symptom was soon verified and confirmed on all sides, and earned for the author's discovery the name of "Koplik's early symptom." Every one indeed wondered how such a remarkable appearance could have remained so long undiscovered. I among others was so surprised at its being overlooked that I was led to look through the literature of the subject, with, in short, the result that in the widely known "Compendium of Pathology and Therapy," written by H. Nothnagel, I found, under the heading of the "Acute Exanthemata," by Jürgensen, a description of the early course of the enanthema and exanthema in measles by the Danish physician, M. Flindt. I extract the following from Jürgensen's work:

"The best description is given by Dr. M. Flindt, and deserves to be exhumed out of the records of the Danish 'Sundhedsscollegium.'

"Second day of fever: A spotted exanthema may be seen on the anterior surface of the soft palate, and on the mucous membrane of cheeks and lips. This shows quite a remarkable appearance due to the numerous minute, bluish-white, shining, and apparently vesicular points which lie in the center of small red spots, and are arranged in irregular groups. One can feel as well as see the small vesicles projecting out above their surroundings. A similar miliary formation is to be seen on the palpebral conjunctiva.

"Third day of fever: Similarly grouped spots with vesicles are visible on the buccal mucous membrane, especially on that part of it lying opposite to the space between the upper and lower back teeth. At this stage the skin eruption first makes its appearance."

The above is a translation of the original. I wish merely to add that the first writer was more exact in his observations, in that he palpated the vesicles and described the conjunctival appearances which Koplik, so far as I am aware, has not mentioned. I may also mention that the time of the appearance of this symptom, namely, before the rash, was defined by Flindt in the year 1880.—*Dr. Siegfried Weiss, Vienna, in Medical Record.*

TALLEST CHILDREN BORN IN SUMMER.—According to Combe, boys born in the months of September, October, November, December, January, and February are not so tall as those born in other months. Those born in November are the shortest. Those born in July are the tallest. Girls, according to the same authority, born in December, January, February, March, April, and May show a less length of body than those born in the remaining months. Those born from June to November are taller, but the tallest are born in August. The investigations of Wahl, in Denmark, and Wretling, in Gothenburg, and especially those of Malling-Hausen, in Copenhagen, on the deaf show that the length of body of boys from March till August increases greatly, but very little from September to February. Dr. Macdonald attributes this fact to some extent to economic conditions, for a child born in summer has generally better food and air. A large number

of parents are poor, and in winter they are forced to economize on account of the expense of heating. They generally live also in small and ill-ventilated rooms. The influence of such conditions on a very young child would be much more detrimental than when the child is older and better able to resist unfavorable surroundings.—*Dr. Macdonald, in Child Study.*

INOCULATION FOR RABIES.—At the Pasteur Institute, in Paris, 1,465 persons were treated in 1898, and all but three were cured. For the thirteen years from the foundation of the Institute to the end of the year 1898, 13,181 persons were treated in Paris, and out of this number only ninety-nine died.—*Scientific American.*

THE CAUSATION OF NIGHT TERRORS.—Dr. Little, in an article in the British Medical Journal of August 19, 1899, expresses the opinion that night terrors are, in the great majority of cases, caused by disorders productive of moderate but prolonged dyspnea. A preponderating number of cases are found in rheumatic subjects with early heart disease. A considerable proportion of cases are due to obstruction of the nasal cavities and fauces. Digestive disturbances do not play the important part in causation that is often assigned to them. The evidence for their causal connection with epilepsy or allied neuroses is scanty. The attacks occur in the subconscious stage of early sleep, and are confined to young children under puberty.—*Medical Record.*

A VEGETARIAN KING.—The King of Italy, according to an English journal, is a vegetarian, and lives entirely on vegetables and fruits. The doctors have also forbidden him to drink coffee, so his beverage is claret well diluted with water. The King never feels so well as when his fare is bread, potatoes, and oranges, although peaches are his favorite food. The Queen has made repeated attempts to become a vegetarian, but finally has given up in despair, being fond of a generous diet.

A PEDIATRIC PHYSICIAN AT KING'S COLLEGE HOSPITAL.—The London correspondent of The Therapeutic Gazette says that King's College Hospital, London, has just appointed a special physician for diseases of children. In America and in several continental nations this would hardly seem worthy of comment, but as a fact this is the first appointment of the kind in a general medical school that has been made at any general hospital in Great Britain.

A VEGETARIAN SANATORIUM IN GREAT BRITAIN.—On the borders of Epping Forest, a few miles from London, is a sanatorium at which the fresh-air treatment is pursued together with strict dieting, the consumption of flesh, fish, or fowl being absolutely prohibited. The results of this system, it is claimed, are most beneficial to the patients, especially in cases of tuberculosis, but cases of cancer (in the early stages) are dealt with on the lines of the experiments tried by the celebrated Abernethy many years

ago. Patients also suffering from chronic dyspepsia, from debility and wasting are admitted. The hospital was opened in 1895, and has proved so successful that it frequently happens that applications for admission have to be refused owing to lack of room.

PHYSICIANS IN GERMANY.—The statistical office has just published returns relative to medical qualifications in Germany, which show that 1,314 candidates became qualified in 1898. Of this number twenty were foreigners, including eight Russians, four Swiss, three Dutchmen, two South Americans, one Englishman, one Mexican, and one African. The total duration of medical study varied considerably with different candidates; 936 studied for nine semesters, 158 for ten semesters, and 211 for eleven semesters and upward.—*The Lancet*.

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—The ninth annual meeting of the American Electro-Therapeutic Association was held in Washington, D. C., at Willard's Hotel, on September 19, 20, and 21, 1899. The convention was successful in point of attendance and interest, and a number of papers were read and discussed. The programme included thirty-six papers and the reports of seven standing committees on scientific questions relating to the medical application of the electrical current, with the best electrical apparatus extant. The proceedings of the convention will be found in their annual Transactions, to be published at an early date. The officers elected for the tenth year are: President, Walter H. White, M. D., Boston; First Vice-President, D. Percy Hickling, M. D., Washington, D. C.; Second Vice President, Charles O. Files, M. D., Portland, Me.; Treasurer, Richard J. Nunn, M. D., Savannah, Ga.; Secretary, George E. Bill, M. D., Harrisburg, Pa. The next annual meeting will be held in New York on September 25, 26, and 27, 1900.—*Boston Medical and Surgical Journal*.

PHOTOTHERAPY AND ITS POSSIBILITIES.—During the past few years there have been occasional rumors of the possibility of the light-rays being used as a therapeutic agent, especially in skin diseases. It is well known that the violet rays of the spectrum affect bacterial growth unfavorably. Some years ago Finsen, of Copenhagen, pointed out that the scars left after an eruption of smallpox were much less serious if the patient were protected from the action of the rays of light belonging to the violet end of the spectrum, as these produce irritation of the skin when concentrated, and in inflammatory conditions, such as smallpox, naturally aid in the destruction of tissue, and consequently intensify the subsequent pitting.

After demonstrating that his theory was correct and that the bad effect of these theories could be eliminated, Professor Finsen experimented further with the idea of making use of the violet and related rays for therapeutic purposes. The results of his experiments were followed with great interest. Nearly two years ago Lesser, professor of venereal diseases and

dermatology at the University of Berlin, in a lecture which appeared subsequently in the *International Clinics*, said that the most promising therapeutic agent against lupus vulgaris, providing it proved as successful in other hands as in those of the discoverer, was Finsen's phototherapy. Finsen's demonstrations at the congress for tuberculosis in Paris last year did not come as a surprise, but they did succeed in convincing the most skeptical of the important therapeutic power residing in rays of light.

Finsen's assistant, Dr. Valdemar Bie, of Copenhagen, describes in the *British Medical Journal* for September 30, 1899, the methods and results of Finsen's treatment. The only indications for treatment are that the disease be superficial, local, and of bacterial origin. So far the light treatment has been applied to lupus vulgaris, to lupus erythematosus, and to alopecia areata. In lupus vulgaris, as the pictures of patients before and after treatment attest, the result is probably better than that secured by any other method of treatment. The application is painless, and the liability to relapse is slight. In lupus erythematosus the effect is not so satisfactory, and relapses are rather frequent. In alopecia areata the results have been most encouraging and seem to demonstrate, beyond all doubt, that that affection is of bacterial origin.

The method of treatment consists in concentrating on the affected parts the violet and ultra violet rays of light. The sunlight of a bright day, or the light of a strong electric arc-light of 50 to 80 amperes, is employed to furnish the white light. From this all rays except those chemically most active are filtered out by means of a blue lens. A hollow glass lens filled with a proper colored blue solution, as a dilute solution of ammoniated copper sulphate, helps to cool the rays as they pass through to the skin. For the electric arc, lenses of quartz are used, because they allow the violet rays to pass more readily than do those of glass. The patients are protected from the heating effect of the concentrated light by a small hollow glass disk, pressed close against the skin, through which cool water is allowed to circulate constantly. A little experience soon gives facility in managing the apparatus, and the danger of accident from the concentrated rays is very slight.

Professor Finsen's work deserves to be known and his suggestions to be put in practice on a much wider scale than has yet been attempted.—*Medical News.*

A PARIS DOCTOR OF PHARMACY.—The degree of Doctor of Pharmacy has just been conferred by the University of Paris for the first time. The recipient is M. Lacourt, who presented a graduation thesis entitled, "Historical, Chemical, and Bacteriological Study of the Versailles Water."—*Ibid.*

LOOMIS SANITARIUM BURNED.—The Loomis Sanitarium at Liberty, Sullivan County, New York, for the treatment of tuberculosis, was destroyed by fire October 14th. No lives were lost. The sanitarium was built in

1895 by J. P. Morgan, in remembrance of the late Dr. Loomis, of New York City. The main building was constructed entirely of stone and closely surrounded by a number of cottages. The fire will cripple but not destroy the usefulness of the institution, for accommodations remain for many patients in the cottages and annexes scattered about the grounds. The total loss, including contents, is about \$100,000, on which there is about \$50,000 insurance.—*Boston Medical and Surgical Journal*.

PHYSICIAN ROBBED IN CHICAGO.—Dr. Oscar W. Hubbard, a Chicago physician, was waylaid by two highwaymen on the morning of October 14th, just after he had visited a patient. Revolvers were pressed to his head, he was dragged into an alley, thrown to the ground, and robbed of a gold watch and diamond pin. One of the robbers was caught and identified by Dr. Hubbard.—*Medical News*.

FATAL CASE OF TETANUS.—A fatal case of tetanus is reported in a child of four years in Williamsburg, Brooklyn, in which the disease was the result of wounds of the face inflicted by the bill of a rooster.—*Boston Medical and Surgical Journal*.

CALIFORNIA NOT TO BAR CONSUMPTIVES.—The State Board of Health has decided not to quarantine California against the consumptives of other States. It has adopted a resolution, however, recommending that in all State institutions those afflicted with tuberculosis be separated from the other inmates. This is a very sensible modification of the radical measures of absolute exclusion of all consumptives at first proposed. While tuberculosis is undoubtedly contagious, it is not so to such a degree as to make quarantine regulations advisable.—*Medical News*.

THE INFLUENCE OF AMERICANS IN CUBA.—*El Epoca*, of Havana, says: "Contact with a race which does not tolerate the shirking of daily labor, and among which, before every thing, a man is the legitimate child of his own merits and his own deeds, must be to us a powerful stimulant for discarding once and forever the accumulation of habits which constitute the unfortunate inheritance of a régime based upon the exploitation of the negro by the white, and the native-born white by the peninsular white, and all by the government."—*Ibid*.

SOME ENORMOUS TUMORS.—The Lancet has lately presented some remarkable records of tumors. The largest known uterine tumor weighed 195 pounds, described by a Bucharest physician. Hunter, of New York, removed one weighing 140 pounds from a woman whose weight without the tumor was 95 pounds. The largest fibroid is said to have weighed 106 pounds. The record for ovarian tumor is held by a Chinese patient, who had one weighing 169 pounds; without it she weighed 77 pounds. For mammary tumors a case is recorded in which the growth in one breast weighed 46 pounds and in the other 40 pounds.—*Ibid*.

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

DYSTOCIA DUE TO THE FETUS.*

BY THOMAS S. BULLOCK, M. D.

The common cause, as well as the most serious, is intra-uterine hydrocephalus. Fortunately this disease is comparatively rare; its gravity as regards the mother is shown by the statistics of Dr. Thomas Keith, who found that sixteen cases out of seventy-four collected were accompanied by rupture of the uterus.

The diagnosis of the disease is very difficult, and it is rarely discovered before delivery. Other forms of dropsical effusion may give rise to dystocia, as hydrothorax, ascites, and a distended bladder. Tumors of various kinds may occasion dystocia, as malignant growths, tumors of the kidney, liver, or spleen. Other deformities, as anem-cephalous fetus, defective development of the thorax or abdominal parietes, allowing protrusion of viscera, are likely to cause delay and embarrass the diagnosis.

In addition to these morbid conditions, difficulties may arise from undue development, especially from excessive size and advanced ossification of the skull. Large size of the body is still more rarely a cause of difficulty. Hirst searched the records of more than one thousand cases of the Maternity Hospital of Philadelphia before finding one that weighed more than twelve pounds. Weights as high as twenty-eight and three-fourths pounds have been recorded.

*Read before the Louisville Medico-Chirurgical Society, September 22, 1899. For discussion see p. 331.

The causes of overgrowth of fetus are prolongation of pregnancy, oversize and advanced age of one or both parents, and multiparity. Rarely it is inexplicable. The same author states that six per cent of pregnant women may be expected to be prolonged beyond the three hundredth day, and each day beyond the usual time the fetus increases in size and weight above the normal. He advises that no woman be allowed to go more than two weeks beyond the normal duration; a good rule if it were possible in all cases to accurately determine the duration of gestation. Ordinarily, if the head can be delivered the body follows with little difficulty; still there are a few authentic cases recorded where it was impossible to extract the fetus on account of the unusual bulk of the shoulders.

Of such a nature is the case I wish to report to-night.

On the morning of September 19th I was requested by Dr. Ed David to see a woman who had been in labor for more than twenty-four hours. I found a large German woman, over thirty years of age, in labor with her first child. The pains seemed vigorous, and recurred every four or five minutes. Examination revealed a cervix about the size of a silver dollar but soft and dilatable, the vertex presenting in third position. I advised the exhibition of chloral hydrate in fifteen-grain doses at intervals of a half-hour, and arranged to see the patient later in the day. At 3:00 P. M. was recalled. The chloral had failed to produce sleep, but the patient had been more comfortable. Examination at this time revealed a cervix about two thirds dilated, but no further advance.

Delivery with forceps was decided upon, and the patient was catheterized and cleansed in the usual way, Dr. Blitz giving the chloroform. The forceps were applied with very little difficulty. Traction was made at appropriate intervals for nearly an hour, when it was evident that no advance was being made. The forceps were removed. After cleansing hand and arm, a thorough examination was made by introducing the hand. It was then found that there was obstruction at the pelvic inlet. The fingers could be swept around the head, which could not descend on account of the impaction at the brim. The child was still alive, and I determined to turn if possible. This was accomplished with moderate ease. The body was delivered until inferior border of the scapula was visible, when an attempt was made to bring down the arms.

Here the real difficulty and delay in the case was encountered and the life of the child lost. It seemed for a time that delivery without extensive mutilation of the fetus was impossible, but with the assistance of Dr. David, the body of the fetus being carried well toward the abdomen of the mother by forced flexion, the posterior arm was brought down, the wedge dissolved, and the anterior shoulder was brought down without trouble. The head followed promptly, as a partial laceration of the perineum was made in delivering the posterior shoulder. It was at once repaired.

The child was one of the largest I ever delivered, and I tried my best to gain possession of it but could not. It was not weighed or any measurements taken, there being no facilities at hand, which I regret exceedingly, as I feel sure they would have greatly exceeded the normal. No information was obtainable as to the date of last menstruation or quickening, the woman being very ignorant, and having arrived in this country from Germany only a month preceding her accouchement. The delay in the first stage and the failure of the os to fully dilate and the absence of advance under great traction were due to the disproportion between the bisacromial diameter and the oblique diameter at the brim of the pelvis, so that the shoulders could not engage.

An additional feature of interest is the fact that the patient was a primipara.

NOTE.—The patient made an uninterrupted recovery, except a cystitis of short duration from repeated use of the catheter, catheterization being necessary because of paralysis of the bladder, due to the protracted and difficult labor.

LOUISVILLE.

TREATMENT OF SCARLET FEVER.*

BY R. B. GILBERT, M. D.

Clinical Professor of Diseases of Children, Medical Department University of Louisville.

Scarlet fever, like measles and smallpox, is a self-limited disease, and therefore at first glance it would seem that the treatment of the disease were a very simple matter. However, when we consider the many dangerous complications and sequelæ that are liable to occur, many of which may be prevented by judicious management of the

* Read before the Section on Diseases of Children, at the Columbus Meeting of the American Medical Association, 1899.

primary disease, the matter of treatment of scarlet fever at once becomes an important one.

It is now pretty generally admitted that there is a specific scarlet-fever microbe, but its exact nature is not yet definitely settled. The time may be near at hand when we shall have the bacteriology of the disease satisfactorily settled and the specific microbe isolated and demonstrated. We may then reasonably expect that a specific germicidal remedy will be found which will as effectually rob scarlet fever of its death-dealing power as has vaccination that of smallpox. Then, indeed (but not until then), will the treatment of scarlet fever be a trivial matter.

Dr. E. M. Landis, of Chicago, has recently reported a case of scarlet fever treated by him successfully by two injections of anti-streptococcus serum. He says the temperature fell from 106.5° F. to 100° immediately after injecting ten cubic centimeters of the serum. He says he did not discover any unpleasant symptoms following the use of the serum. We will wait with interest the developments along this line.

Since there is no known remedy that will abort the disease, we must be content to conduct it to a safe termination, and at the same time make our patient as comfortable as may be under the circumstances. Besides the welfare of the patient under treatment, there is another equally important matter that the physician should attend to, viz: to prevent, as far as possible, the further spread of the disease by infection and contagion. May we not with propriety, under the caption of Treatment of Scarlet Fever, include also prophylactic treatment?

It may be briefly stated that the leading indications in the management of scarlet fever are to guard against infection, hyperpyrexia, profound anemia, and complications.

The milder forms of scarlet fever need really no treatment other than keeping the patient in bed and the enforcement of prophylactic precautions. We must, however, remember that the danger of infection is just as great in the mild cases as it is in the severer forms. Although the danger of infection is not so great early in the disease as it is in the latter stage, yet measures to prevent the spread of the disease should be promptly adopted. As soon as the diagnosis is made, the scarlet-fever patient should be carefully isolated. The room in which he is to remain should be divested of all curtains, carpets, cushioned furniture, books, papers, toys, etc. Dogs and cats should be rigidly excluded from the room, as they readily transmit the germs of the disease in their

fur. All the excreta from the patient should be received in a receptacle containing a strong antiseptic solution.

By far the greatest danger of infection and contagion is from the exfoliations of the skin during convalescence. Each minute epithelial scale, scarcely visible to the unaided eye and light enough to be wafted about in the air, carries with it numerous scarlatinal microbes. These epithelial scales are exfoliated in the form of furfuraceous dust, and when they are once set afloat in the atmosphere they are beyond control. They entangle themselves in the clothing, especially of woolen goods, and may be carried long distances and be kept for many months and still retain their vitality.

The simplest and yet most efficient means of dealing with the cutaneous desquamations is to keep the skin thoroughly anointed with hog's lard or olive oil, which may be scented with some aromatic oil if desired. The application of lard has a very soothing effect upon the skin; it allays the itching and burning, and gives a sense of comfort and quiet to the patient. I have often seen the temperature fall a degree or more in a few minutes after free inunction. The exfoliating scales are thus loaded down with grease and will not float about in the air, but are rubbed off in rolls and drop on the sheet, from which they can be easily gathered up and cast into the fire.

By thus preventing the fine particles of epithelium from floating about in the room, the attending physician's clothing is less liable to become infected. It is a well-known fact that the germs of the disease have frequently been carried from house to house in the clothing of the careless and unsuspecting doctor. All bedding and clothing that have been used about a scarlet-fever patient should be thoroughly disinfected before being used again. This can be done cheaply and effectually by submitting them to the action of boiling water or "live steam" for a few hours. This method of disinfecting is more reliable than fumigations with sulphur or formaline.

What shall we do for hyperpyrexia in scarlet fever? Any temperature above 103° F. should be regarded as dangerous on account of the derangements so liable to occur to the nervous system and glandular organs. When antipyrin was first introduced it was my custom to give it for reducing temperature in scarlet fever, but on several occasions I have had serious threatening of heart-failure from its use, and now I never use it. Quinine combined with phenacetin and caffeine in appropriate doses and at short intervals until the temperature is suffi-

ciently reduced is safe and reliable, and it should be given whenever the temperature rises above 103° F. The patient should be encouraged to drink cold water freely. The full bath and wet-sheet pack are recommended by some high authorities, but there are many objections to their use. In addition to the fright and excitement caused by the bath, the depression and shock which follow are sometimes alarming. The only cases in which I think the full bath advisable are those in which the patient has very high temperature and violent delirium.

The pharyngitis and tonsillitis, which are almost always a complication, should be treated by frequently spraying the throat with a mixture of equal parts of peroxide of hydrogen and lime-water. This has a decidedly soothing effect upon the pharyngeal mucous membrane, and relieves much of the difficulty of deglutition. The same mixture should occasionally be sprayed into the nasal passages also for its detergent effect. The use of peroxide of hydrogen, as above described, materially lessens the danger of infection by the secretions from the throat and nose.

To allay restlessness, especially at night, chloral hydrate is the most acceptable remedy. Opium should be studiously avoided in the treatment of scarlet fever, for the reason that it lessens the activity of the renal secretion and thus increases the danger of nephritis.

The next most important indication in the treatment of scarlet fever is, as far as may be, to prevent the profound anemia that usually follows in the course of the disease. Iron in some palatable form should be given from the start, notwithstanding the old adage, "never give iron in fever." The ammonio-citrate of iron in one-grain doses, suspended in simple syrup, is a pleasant medicine. It is my custom to give this form of iron throughout the course of the fever. I believe that it prevents, in a measure, the deterioration of the blood and lessens the danger of complications and sequelæ. I believe that the use of iron as above indicated aids materially in maintaining the function of the heart, and thus the better function of all the organs of the body.

Nephritis is, of course, the most dreaded sequel of scarlet fever, to prevent which we should do every thing in our power. In addition to controlling the temperature by keeping it below 103° F., and supportive measures by the administration of iron, we should be careful to see that a sufficient amount of easily digested food is taken to sustain the vital forces. Liquid diet, such as soups, milk, and broths, should be given. The patient should be carefully guarded against drafts of cold air. He

should be kept in bed, and under sufficient cover to promote the action of the skin, which may be facilitated by drinking freely of hot lemonade.

With quinine and phenacetin to control temperature, chloral hydrate to induce sleep, and iron as a supportive, we can meet the leading indications in the disease, and by frequent inunctions the desquamations from the skin are prevented from floating about in the air and spreading the infection. Thus we may sum up the management of typical cases of scarlet fever.

For fear of being tedious I shall not, in this paper, discuss the treatment of the various complications and sequelæ. My aim has been rather to present a few practical measures of treatment, with an eye to the prevention of dangerous complications and sequelæ.

LOUISVILLE, KY.

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Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, September 22, 1899, the President, William Cheatham, M. D.,
in the Chair.

Case of Appendicitis. Dr. T. S. Bullock: This appendix illustrates how much damage may be done, and how disproportionate the symptoms may be in appendicitis, or there may be practically no symptoms. The patient, a man sixty years of age, was seen first on Monday afternoon complaining of pain in the right side, but an examination at that time revealed an absolutely relaxed abdomen, no muscular rigidity, with pain not in the region of the appendix, but in the region of the umbilicus. I did what I think was improper at that time, gave him an hypodermic of one-quarter grain morphine. This did not relieve him, and I saw him the next day. At that time he was still suffering excruciating pain, which had been unrelieved by the opium. Examination then revealed tenderness at McBurney's point and some muscular rigidity. I had him removed to the Infirmary and operated the next day. The appendix was gangrenous for at least one and a half inches from its base, though the man had had no prior symptoms to the Monday morning mentioned, and it also contained several enteroliths.

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

The case is only interesting in so far as it shows how much damage may be done and how few symptoms may be present.

Dr. L. S. McMurtry: The case reported by Dr. Bullock is interesting, and illustrates a most valuable point in the symptomatology of this many-sided and many-formed disease—appendicitis. The case illustrates a class that becomes more interesting the more we study them; cases where it seems to the laity and the patient's friends that it is folly to operate upon a man who evidently is not sicker than this, who has the symptoms of ordinary colic; a case where the patient and the surgeon himself will be lulled into a sense of security by the fact that there is no rigidity of the abdomen, where the bowels have moved freely; with a pulse and temperature that remain almost normal—an array of symptoms that seems absolutely inconsistent with so much pathology within the abdomen.

Dr. A. M. Cartledge: Two or three years ago I had occasion to call attention to what this case seems to illustrate, that excessive pain in the initial stage of appendicitis without muscular rigidity is a sign of early death of the appendix from strangulation, and it is striking that some of these cases are very much like strangulated herniæ in that there is no time for inflammatory reaction, a sudden blocking of the terminal artery of the appendix and sudden death of the organ. This is the most misleading type of cases with which we have to deal, and I know of nothing so valuable in suspecting them as the intensity of the pain. Given a case of sudden and great intensity, pain being the dominant symptom, without any especial muscular rigidity that we rely so much upon to make a diagnosis, I would believe from my experience that such a case demands earlier operative interference than any other class. There are other cases where death of the appendix takes place from primary eschemia, in which there is also intense pain. Again, we meet with the same thing in severe forms of infection. There is no doubt but we have to deal with varying degrees of infection here, both in intensity and character. Sometimes the organ dies with great rapidity; but I believe most of these cases are cases where strangulation occurs either from torsion of the appendix twisting the appendiceal artery, or a septic thrombus first of the vessels over the base, cutting off the circulation, causing great pain and enough inflammation to give rise to tenderness and muscular rigidity, all of which is misleading and shows that we can not prognosticate in these cases; but all these symptoms, in my judgment, betoken a virulent course of appendicitis, and the

most of such cases die. No symptom is as valuable as great pain in the initial stage.

Tumor of the Neck. Dr. A. M. Cartledge: The following case was operated upon six days ago. An old gentleman sixty-seven years of age, with the history of having had an epithelioma removed from his lip a year ago, presented a letter from his physician stating that the glands beneath the jaw were involved, and advised that the patient see me. I found the old man with an enormous mass of cancerous glands beneath the jaw and extending to the median line, lapping over the jaw up to the angle and probably down to midway of the neck. They were very deep, and seemed to extend behind and beneath the sterno-cleido-mastoid muscle.

My first impression was that the case was entirely inoperable. There did not seem to be any tendency to recurrence in the scar on the lip; the surgeon in Indiana who performed the original operation seemed to have gotten an excellent result. Finally I told the man if he was willing to submit to an extensive and probably dangerous operation, I would attempt the removal of the mass. He consented, and, after studying over the case, the first thing I did was to ligate the common carotid artery; I then proceeded without the loss of a great deal of blood to extirpate the mass, which had pushed the tongue up the floor of the mouth; going downward I found that the outer glands went along by the internal carotid and jugular vein a distance of two and a half inches. I resected about two and a quarter inches of the internal jugular vein with the growth.

The man went on the table in good condition, and did very well after the operation until the third day, when he developed a little mental dullness. He seemed to be not quite himself; he would get up out of bed and walk about the room, etc. Yesterday morning it was discovered that he had lost the use of his right hand, and by noon it had extended to the right leg, so that paralysis was rather complete in the upper and lower extremities of the right side.

I simply report the case as illustrating one phase of ligation of the carotid. I think it may be directly connected with that, and the question with me is whether it is primarily embolic or thrombotic. I am inclined to think it is a thrombosis of the terminal artery obstructing the circulation, or an eschemia, rather, from a plug that has washed from the distal side of the ligature. The reason for this belief is that there was a premonition in the way of a heavy intellect, the

slow way in which the paralysis came on, first involving the right arm and hand, then in a few hours involving the lower extremity. I have not had an opportunity to look up the literature of the subject, but remember that paralysis from embolism or thrombosis is one of the things to be expected after ligation of the common carotid. This is the fifth time that I have practiced ligation of the common carotid artery, and it is the only case in which there has developed an unpleasant symptom.

Discussion. Dr. J. M. Ray: Would it not have been possible for the doctor to throw a rubber ligature around the common carotid, and thus have control of the blood-supply? I ask the question because, a short time ago while in New York, I saw a resection and removal of the superior maxillary for malignant disease; it was an extensive operation, but there was little blood lost. The common carotid was exposed, a rubber ligature thrown around it, the ends being handed to an assistant, and the operation was performed very quickly. Whenever there was much blood the assistant was notified to pull on the ligature, and hemorrhage was easily controlled in this way. The operation was completed, the rubber was removed, and the whole cavity from which the bone had been removed was packed with gauze. I saw the patient four days afterward, and she was doing nicely.

Dr. A. M. Cartledge: The plan suggested by Dr. Ray is the one that is commonly employed in operations requiring the control of the distribution of the carotid circulation; it was considered in the case reported, but the cancerous growth was so extensive that I feared we might make more or less an incomplete removal, and it was desired to cut off the blood-supply to the mass. Had I known it was possible to have removed it as completely as we did, I would have practiced the method spoken of. What I had in view was this, if it were found impossible to completely remove the growth, permanent ligation of the artery would lessen the blood-supply and so limit its development. There are other objections to constricting a vessel the size of the common carotid in an old man. There is great danger of leaving a weakened spot which may be the source of subsequent trouble. I have never practiced the compression method, but have ligated the artery in four other instances, and in no previous case did any trouble result.

The essay of the evening, "Dystocia Due to the Fetus," was read by Thomas S. Bullock, M. D. [See p. 321.]

Discussion. Dr. Turner Anderson : All cases of dystocia occurring in obstetric practice are interesting. This case is reported in such an intelligent way, the different steps being so carefully recorded, that there is little left to discuss. That the child was lost, under the circumstances, I am not surprised. I do not see how the management of the case could have been improved upon. One thing in connection with the delivery in cases of this kind must be emphasized, and Dr. Bullock and his associates recognized it I am sure, and that is, we should have a fully dilated os before we attempt our manipulations.

Dr. C. Skinner : The case reported brings vividly to my mind a night that I spent with a patient about ten years ago under the same condition of affairs, with a primipara. It was impossible to deliver with forceps. The child was turned and lost during the delivery. It weighed fourteen pounds.

Dr. E. L. David : There is nothing that I care to say, except to add to the case just reported that the patient has done uninterruptedly well. She has not had a temperature of over 99.2° F.; pulse not exceeding 120 to 125; no odor to the discharge, which is about normal in quantity, etc., and every thing indicates a favorable termination.

Dr. W. O. Roberts : In connection with the weight of the child : Five and a half years ago I was called to see a primipara in labor; she had been married twelve years without having given birth to a child. Dr. Anderson was called in consultation and delivered the woman with forceps without rupturing the perineum; it was a head presentation, and the child weighed exactly fourteen pounds without clothes. There was nothing abnormal about the child.

Dr. T. S. Bullock : The point of especial interest in the case was the extremely large diameter of the shoulders; it really looked like a deformity. I appreciate what Dr. Anderson has said. When I introduced the forceps the os was not entirely dilated, but manipulation and traction dilated it more than two thirds, when I attempted version, and the fetus was brought down until I could see the interior border of the scapula. The arms were somewhat extended above the head, and trouble was experienced in bringing them down; the bulk of the child's body interfered materially with my manipulations, and unless I had had some intelligent assistants I do not believe it would have been possible for me to deliver the child without mutilating it. The posterior shoulder was delivered with great difficulty, I never experienced

as much, and it was this that lacerated the perineum. After the shoulder was delivered the head came down easily.

Recto-Vaginal Fistula. Dr. L. S. McMurtry: I have a very interesting case under observation at the present time. It is the case of an unmarried lady about thirty years of age. She has been in my care only two days. Her physician stated in a note to me that about three months ago he had introduced a pessary on account of a displacement of the uterus. She lived some distance from him, and he did not see her for some days. He was then called to see her on account of some very serious complaints which she made. He found that the pessary had been removed because of the pain it gave, and she then had a recto-vaginal fistula. This fistula is immediately above the sphincter, it is a little to the left side, and presents the characteristic appearance of pressure necrosis, and if anyone had encountered it in a woman who had a history of having borne children, it would have been presumed due to pressure of the head.

I have never seen the physician who attended the patient and who referred her to me, hence have not had a chance to obtain details of the case. I have never known of such an accident, nor have I seen such an one recorded. I have seen and have removed pessaries that have been in the vagina for two years, when they have made a groove in the tissues of the vagina so that the mucous membrane would stand up around the pessary, leaving a distinct pit where the pessary was embedded, but I have never before known of an instance in which there was a perforation of the recto-vaginal septum.

Discussion. Dr. Louis Frank: I do not see how a pessary properly introduced could produce a fistula of the character described. It may be the pessary was improperly introduced, and in such event might produce a fistula.

Dr. T. S. Bullock: I agree with what Doctor Frank has said. If the uterus were not much enlarged, and the pessary being properly introduced, I fail to see how a fistula could be produced thereby. If the weight borne upon the pessary were considerable, a recto-vaginal fistula might be produced, but not in the location described. I have seen pessaries buried in the sulcus from long existence in the vagina, but have never seen a recto-vaginal or any other kind of fistula produced by their presence. I have seen neglected cases where pessaries have been left for years and nothing of this kind had resulted; but in

this case, if the pessary were properly introduced, then the fistula described would have been an impossible result, unless the uterus was very much beyond the ordinary weight, and unless the tissues were diseased.

Dr. C. Skinner: I can not understand how the pessary could have produced the fistula in this case. The doctor who introduced it ought to be fined for using the pessary, but not for the production of the fistula.

Dr. Wm. Bailey: While I am inclined to state that a recto-vaginal fistula from the presence of a pessary would be impossible, yet the fact remains that such a result obtained; and as this fistula followed the use of the pessary, it is the natural conclusion that the pessary in some way was responsible. It may have been that the tissues were not well supported, the introduction being faulty, even this moderate pressure which in other cases might not produce a fistula or other inconvenience. I think it is certainly possible that in this case it was the result of the pessary.

Dr. A. M. Cartledge: Like the rest of the Fellows who have spoken, I have never seen such an accident. I have removed pessaries that were incrustrated, that had excoriated the walls of the vagina, yet no further injury had occurred. I do not know that I have ever heard this question raised before, and have never seen it in the literature. The great point of interest in this case is the question of what status such an instance would present in a medico-legal way; what testimony a man could consistently give. I believe it would be proper to say that it was impossible for an ordinary pessary to produce a perforation of the vaginal septum, it matters not whether applied properly or improperly; that without some co-existing conditions of disease a pessary could not possibly produce a fistula into the rectum. If the pessary was responsible in this case, there must have been some pre-existing condition of the tissues to make the resulting fistula possible. There is nothing in the literature of the subject to show that a fistula has resulted from the introduction of a pessary with a woman in good health.

Cystic Ovaries and Appendicitis. Dr. W. O. Roberts: Last Saturday I removed a couple of large cystic ovaries, and before closing the abdomen I concluded I would look at the appendix. There had never been, however, any symptoms referable to the appendix. I found three

large enteroliths which completely filled the canal of the appendix. Of course the appendix was removed.

I merely mention this case to call attention to the importance of always examining the appendix when the abdomen is opened for any condition.

Discussion. Dr. A. M. Cartledge: I think it is always advisable to examine the appendix when the abdomen is opened for any other cause. I have removed several appendices when operating for ovarian disease. It adds nothing to the risk, and we should always remove the appendix when it is found diseased in operating for other troubles.

Dr. W. O. Roberts: There have been a number of cases reported where foreign bodies have been found in the appendix when the abdomen had been opened for other causes, without any symptoms referable to the appendix having been complained of.

Report of a Case. Dr. F. C. Simpson: The following case is reported because of its puzzling nature. In the early part of August I was called to see a boy aged twenty years, a robust, healthy-looking boy, who had an attack of malaria. It began with chills. He had several chills with a temperature of 104° to 105° F., extending over a period of a week or ten days. He recovered from this attack apparently, and was able to be out for a week or more. At the end of about a week he had another chill. I saw him at six o'clock in the evening; he complained of great pain in his head; he was very restless; temperature 104.5° F. He slept very little that night. I gave him some bromide and put him on large doses of quinine, which had broken up the previous attack. This was Saturday night. On Sunday he still complained of intense headache, and was quite restless. Temperature 101° F. At two o'clock on Sunday I gave him an hypodermic injection of one-quarter grain of morphine to relieve the headache, which it did not. He was also given some bromide Sunday night, but suffered all the time with intense pain in his head. The temperature went up Sunday afternoon to 104° F. I gave him fifteen grains of quinine that night; he slept none. On Monday morning he was still restless, tossing about and complaining of great pain in his head. Rather early in the morning I gave him $\frac{1}{16}$ grain of the hydrobromate of hyoscine. At half-past one I saw him again; he was still restless, and I gave him one-half grain of morphine hypodermatically. In twenty minutes he went to sleep. In

about an hour afterward he had a slight convulsion. He never regained consciousness, and died at seven o'clock that evening with no evidence of return of consciousness.

I was at first worried, thinking he had been given an overdose of morphine, but there were absolutely no symptoms of such a condition. I take it he had a cerebral hemorrhage, which is rather unusual in a boy of twenty years. He had an intense headache for forty-eight hours, and morphine had no effect upon it.

It would be interesting to know exactly what produced death. No post-mortem was allowed.

Discussion. Dr. F. C. Wilson: I met with a case to-day in which a man had been complaining of full habit, some headache, particularly upon the left side. I had given him bromides, which afforded some relief. This afternoon he came by the office complaining in the same way. I opened a vein in his arm and extracted about a pint of blood with very considerable relief. This is the first time I have bled a patient for several years. I believe it to be justifiable and a rational procedure under some circumstances. Of course the use of the bromides is purely an expedient; the other is a little more permanent in its effect. In those cases of threatened convulsions, threatened apoplexy, I believe the attack may often be warded off if prompt measures of this kind are instituted. Of course if rupture occurs, then it is too late to use bromides or resort to bleeding; but if either of these can be made use of before rupture actually occurs, so as to relieve the blood-pressure, the danger of rupture may be averted, and I believe in many instances apoplectic seizures might be avoided if measures of this kind were resorted to promptly.

Dr. T. S. Bullock: How do you know when a patient is threatened with apoplexy?

Dr. F. C. Wilson: When a patient comes to me complaining of headache confined to one side, accompanied by a numbness of one arm and leg perhaps, the opposite side from which he complains of headache, I conclude at once that there is a congested condition of that side of the brain; and if at the same time there is flushing of the face, it seems to me that I am justified in believing that there is too great fullness of the vessels of that side, and that there is danger of rupture. A little exertion on his part which would increase the blood-pressure would seem to me to be liable to actually break a small vessel, with the

outpouring of blood resulting in an apoplectic seizure. Under these circumstances, if we can lower blood-pressure in any way, it seems to me we will accomplish good, and this was my aim in the management of the case referred to.

Dr. William Bailey: I would like to call attention to the discovery of a lost art, as stated by Gross in 1875, whether or not some good results have not been accomplished by free saline purgation in this class of cases, getting the benefits without the loss of the corpuscular elements of the blood, lowering tension by diet, by the amount of liquids taken, and the abstracting of serum by means of saline catharsis, giving remedies that have an influence in lessening congestion of the brain. This would be the course that I should rely upon, not knowing of any circumstances under which I think it is necessary to abstract blood from the patient.

Dr. Turner Anderson: I do not feel it incumbent upon me to remain silent upon a matter of so much importance. I belong to a class of doctors who believe that phlebotomy is a proper therapeutic measure under certain circumstances. I think Dr. Wilson was justifiable in practicing bleeding in the case reported, and if bleeding were employed more freely, perhaps the conditions which the doctor encountered in this case might be avoided. Very recently I was called to see a patient who had had several convulsions. I found a muscular individual, evidently a very full-blooded person, and as I entered the room he went off into a most terrific spasm. A ligature was applied around the arm, and a vein opened. I did not stop at a pint, but allowed the man to bleed until quite a large quantity of blood had been withdrawn. The ligature was then removed. This man did not have a single convulsion afterward. A few days ago I was driving along the street, and was hurriedly summoned to see a woman who had fallen on the sidewalk and was carried into a neighboring house. She was a very large woman, and had fallen in a convulsion. She was bled freely, and her convulsions ceased. In this case I opened an artery. I later returned to take off my bandage, and learned that the woman was seven months pregnant. She was very obese, plethoric, she was seized on the street with vertigo, perhaps threatened apoplexy, and the arteriotomy seemed to afford complete relief. I am not sure that there are not cases in which arteriotomy or phlebotomy will be of decided advantage. I simply make these remarks in support of what Dr. Wilson has said in regard to cases of threatened apoplexy.

Dr. T. S. Bullock: I have seen Dr. Anderson perform this little operation in several cases, always with a happy result. I am rather inclined to believe the indications for it are somewhat marked if we have not time to produce free catharsis, and I also believe there are cases in which it is a proper therapeutic measure.

Dr. William Bailey: The early part of this week a lady came to see me; she had what appeared to be Bell's paralysis, facial paralysis, and inquiry developed the fact that she was about six months pregnant. I had her send me the next day a sample of her urine, which I found to be highly albuminous. Is it common for women with such a condition of the kidney, as would favor at least puerperal convulsions, to have paralysis? Is there any condition about the kidney in which there would be due to it a lesion producing this paralysis? Or may it not be that the cause of the paralysis is external to the skull and simply a coincidence? In other words, is the cause of the paralysis peripheral or central?

Dr. Louis Frank: Perhaps Dr. Bailey could determine whether the cause is peripheral or central by applying the electric test. I remember a case of facial paralysis in which Naunyn insisted that the patient had syphilis until he applied the electrical test, when he decided that it was peripheral and not central.

Foreign Bodies in the Air-Passages. Dr. J. M. Ray: I have seen two cases within the last few months of foreign bodies in the air-passages that were of special interest to me:

Case 1. I was asked to go to an interior town. I found a child eighteen months old without any history beyond the fact that for ten days previous to my visit the child had been breathing heavily, with a little cough, and that it had lain practically in one position for ten days. Its head was thrown back, respiration very rapid, no fever; the child was perfectly conscious, and complained of no pain unless moved out of the position mentioned, lying on the nurse's lap with its head thrown backward and breathing rapidly.

Examination showed no foreign body in the upper air-passages. However, in examining the child's chest I found a spot in the right lung where there seemed to be some obstruction, a peculiar noise produced by the incoming and outgoing air. The lung was not collapsed, and there was no particular amount of dullness on percussion. I gave it as my opinion that there was a foreign body in the bronchus, and

suggested that the best thing to do was to try and locate it by means of the X-ray.

Two days afterward the child was brought to this city and taken to Dr. Butler for the purpose of having him make an X-ray picture. This was done, but the photograph showed nothing. The patient was then seen by Doctor Marvin, who agreed in my diagnosis, that there was a foreign body in the right lung; that nothing could be done except to wait developments.

This condition remained the same for a week or ten days longer, when the condition gradually cleared up and the child recovered without any bad symptom.

Now, exactly what there was in the bronchial tube is a mystery to me, unless, as the mother said, that the child was very fond of crawling around the room, and that it had on one or two occasions crawled out into the yard and gotten hold of some clover blossoms; she had noticed several times the child had taken them in its mouth.

Case 2. I was asked to see the next case at the Sts. Mary and Elizabeth Hospital by Dr. Galvin. The history was that the Thursday before the boy was eating some kind of preserves and swallowed a piece of glass; he had remained at home without any doctor until Sunday afternoon, when Dr. Galvin was sent for. There was then no difficulty in breathing, but the boy had been unable to swallow any thing. The doctor examined the throat as well as he could, and, not finding any thing, the boy being unable to take any nourishment, was sent to the Sts. Mary and Elizabeth Hospital. I saw him on Monday, at which time the only thing he complained of was difficulty in swallowing. There was no obstruction to breathing, and no interference with his voice. I examined him carefully, making a laryngoscopic examination, and found nothing visible in the upper respiratory passages. I then took a soft rubber tube, similar to that used in washing out the stomach, and passed it through into the stomach without meeting any resistance whatever, and immediately afterward the boy expressed himself as relieved. He immediately drank a glass of milk, and that evening ate some soft food, eggs, mush, etc.

I saw nothing more of the patient until Thursday, when I was telephoned to come out to the hospital at once, that the boy had had a suffocative attack; that he came very near dying of suffocation. I found him breathing rapidly, twenty-six to the minute, with a little fever, temperature 101° F. I examined his chest again, but could make out

no evidence of a foreign body in the lung. Dr. Lucas happened to be in the insititution at the time, and was called in and asked to examine the chest. He did so very thoroughly, and failed to locate a foreign body in the lung. The next day the boy had another suffocative attack, and a tracheotomy was performed. Relief was not brought about by the operation, and the boy died two hours afterward with evidences of obstruction lower down.

Exactly why, if there was a piece of glass in the bronchus, more symptoms were not present when I first examined this boy, I am unable to understand; and why the passage of a rubber tube into the stomach produced immediate relief to the apparent obstruction is equally puzzling.

I would like to have the benefit of the advice of other members upon these two cases.

Discussion. Dr. T. L. Butler: In regard to the first case reported, we could find nothing with the X-rays, except, as I told Dr. Ray at the time, that the heart shadow was entirely on the right side. I believe, from my examination of the patient, that there was a foreign body in the right lung, and if it was of the character that Dr. Ray has described, of course the X-rays would not show its presence.

THOMAS L. BUTLER, M. D., *Secretary.*

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Foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Hospital Abuse and Its Reform; A New Fever Hospital; Treatment of Consumption; Sleeping Sickness; An Archbishop at St. George's Hospital; Increase of Lunacy; The New Entry of Medical Students.

At the two days' conference on "Hospital Abuse and Its Reform," held under the presidency of Dr. W. Knowsley Sibley, the most interesting subject under discussion was the inquiry system in connection with applications for medical aid. Sir William Broadbent, M. D., said that unless inquiries were made at all hospitals, and on a uniform system, the result would be to simply shift the undesirable and undeserving applicants into those districts

where the inquiry was most lax or wanting. He felt strongly that some general method was necessary, as the revelations consequent upon the investigations of applications for charitable relief were startling. It was found that in many cases at present the poor and needy were excluded from that which was intended for them.

The Metropolitan Asylums Board have completed another of their fever hospitals which now encircle London. There are now twelve fever hospitals and two convalescent homes in working order; these provide accommodation to meet slightly more than normal needs, and it is hoped that, allowing for the rapid increase of population, further extension will not be required for some years. It is a subject of remark that wherever the hospitals have been placed, there populous streets have closed round them. The Asylums Board have to deal with from 5,000 to 6,000 cases weekly. The hospital just opened occupies about twenty-two acres, the various blocks being connected by long open corridors, lighted as a whole by electricity, and providing accommodation for five hundred and twenty-eight patients.

The medical registrar of the North London Hospital for Consumption states that 183 cases of consumption have been treated on the open-air principle since January last. Of these, 43.7 per cent left the institution to return to work, 32.3 per cent considerably improved, 7.6 per cent slightly improved; 4.3 per cent did not improve, and 3.9 per cent died. He states that it is a usual occurrence for patients who enter the institution with extensive signs of tuberculosis to leave after nine or ten weeks with no active signs of the malady and an increase of fourteen pounds in weight. In every case the disease, when taken in its earliest stages, improves rapidly under treatment. A large number of patients who have left the hospital keep up a correspondence with the medical staff, and no one who markedly improved and followed out the hygienic principles taught has shown any signs of relapse.

Dr. Mott, at a meeting of the Pathological Society of London, related his investigations of the central nervous system in two cases of Congo or sleeping sickness. He examined in each patient the brain and spinal cord, pituitary body, and spinal ganglia. There was found in one case that the tissues to the eye presented but little change beyond some thickening of the pia-arachnoid. The cerebral convolutions were complex and not atrophied, the brain weighing fifty-four ounces. The fluid was normal, and the two hemispheres were of the same weight. In the other case the dura mater was seen to be adherent to the calvaria. An abnormal quantity of cerebro-spinal fluid was present. Over the convolutions the pia-arachnoid was somewhat thickened and opaque; the same membrane was in like condition at the base of the brain. The brain weighed thirty-six ounces. In neither brain was there flattening of the convolutions, erosions on stripping the membranes, or dilated ventricles with granular ependyma. The nervous tissues were removed before any post-mortem change had taken place.

Upon examining microscopically stained sections of the hemispheres, cerebellum, pons, medulla, and cord, both examples exhibited like conditions. There was a lepto-meningitis and encephalo-myelitis. All the perivascular limits throughout the whole nervous system were distended with mono-nuclear leucocytes. Dr. Mott from his investigations concluded that the convulsions from which patients suffer were the expression of the increased irritability prior to death of the cortical motor neurons; the characteristic drowsiness and lethargy, and the progressive weakness in body and mind, unaccompanied with distinct paralysis or mental disability, was accounted for because the metabolism or functional activity of the neurons, as a whole, was affected injuriously either by some toxic product circulating in the blood or existing in the cerebro-spinal fluid; this toxic agent gave rise to great proliferation of mono-nuclear leucocytes beneath the pia-arachnoid and in the perivascular lymphatics.

The Archbishop of Canterbury gave the prizes recently to the various students at St. George's Hospital Medical School. During his address the Archbishop said, while professing the deepest reverence for the medical profession, he was yet tempted to doubt whether the art of medicine was as successful as the science of it, and whether the faculty had reached the point beyond which it would be impossible to go. At the same time, his Grace fully admitted the blessing conferred upon humanity by the medical calling as among the greatest that the world could boast, though he sometimes—especially in his old age—deplored the fact, as a free and liberty-loving Englishman, the doctors should be such "terrible tyrants."

The London Hospital inaugurated the new session with a dinner. During the past year the medical school buildings attached to the hospital have at the cost of £8,000 been considerably enlarged and fitted up to meet every possible requirement of present-day medical education. Professor Haffkine, the discoverer of the anti-plague serum, was the guest of the evening.

The Asylums Committee of the London County Council in their most recent report show a considerable increase in pauper lunatics. The first reliable statistics of pauper lunatics in the newly formed county of London were obtained on January 1, 1890. The number at that date was 10,100. On January 1st last the number had increased to 14,645. Certified lunatics, the committee point out, are increasing at the rate of 600 per annum.

St. Bartholomew's Hospital again has the largest entry of freshmen, the numbers being one hundred and fifteen who have entered for the full curriculum, fifty-two who have entered for special courses, and seventeen who have joined classes for preliminary instruction.

Dr. Dickinson says that the tendency of the age is to enlist in modern medicine the service of the great forces of the external world rather than place their chief reliance on the druggist, and he predicted that every zymotic disease would be found to have an extraneous origin.

LONDON, October, 1899.

Abstracts and Selections.

PURE-FOOD LEGISLATION.—Unless the matter be forcibly brought to our attention it is not easy to realize how generally we are imposed upon by those whom we may properly call the manufacturers of food. At a recent meeting in Boston of the Farmers' National Congress, Hon. H. C. Adams, Dairy and Food Commissioner of Madison, Wis., presented facts which are well worth our serious consideration. From his showing it would appear that practically all of our food staples may be and often are adulterated, or actually made outright from substances far removed from the advertised finished product. No doubt the possibility of defrauding the public in this matter increases year by year, as methods of chemical analysis and synthesis are coming to be more generally recognized and understood. It is an easy and a tempting step from such knowledge to its fraudulent use in the manufacture of products which are foisted on the unsuspecting buyers to their detriment and to the great gain of manufacturers. Some of the possibilities in this line we quote from Mr. Adams' remarks:

"The clumsy wooden nutmeg of Connecticut, that even a policeman might detect, has given way to artificial eggs which no hen would recognize, and to artificial butter that never knew milk. The universal demand for cheap things brings a supply. Wheat flour is adulterated with corn flour; buckwheat with wheat middlings. Vermont maple syrup is made that never saw Vermont, and is made from the sap of trees that grow in Chicago. Glucose has dethroned cane syrup. Cider vinegar is distilled from grain. A good portion of the strained honey of commerce never produced any strain upon the bees. Milk is robbed of its cream, filled with lard, and sent all over the world to ruin the reputation of American cheese. Oysters are partially embalmed with chemicals. Lemon extracts are made without lemon oil, and vanilla extracts without vanilla. The hogs of the North compete with cheap cotton-seed oil of the South, and mix in the same tub under the banner of lard. Artificial smoke is made for hams out of poisonous drugs. Jellies colored in imitation of the natural fruits and sold as fruit jellies flood the markets, although they are almost as destitute of fruit juice as a bar of pig iron. The embalmed-beef business has been exaggerated, but we do not need any for either soldiers or civilians. Canned fruits are preserved with antiseptics which delay the digestive processes. Baking powders under various misleading names crowd the markets. Spices enriched with pepper hulls and ground cocoanut shells are manufactured and sold by the ton. The close partnership which has existed for so many years between coffee and chicory does a thriving business in many States under the firm name of coffee. Cheapness is secured by these adulterations and false labelings, but the people are defrauded."

We quote the above statement as an example of what is going on about us, from which the poor, who need legislative protection most, are the

chief sufferers. The manufacture of oleomargarine as a substitute for butter is a case in point. The necessity for legislation as applied to this product is said to be recognized now by thirty-two States, which have prohibited its sales under the guise of butter. Massachusetts has been a pioneer in the movement for improved laws, and experience has shown that State laws are usually sustained by the courts. Mr. Adams feels very strongly that we need a comprehensive national pure-food law, which shall so regulate the general question of food that its adulteration for the benefit of the few will no longer be possible. It is evident that such legislation must be somewhat slow in coming; that it will be bitterly opposed and vigorously contested in the courts by the manufacturers of adulterated foods. In the mean time, however, it is desirable that our attention should be called to the matter, and that both as individuals and as a profession we should do what lies in our power to combat what is clearly a growing evil of very great magnitude.—*Boston Medical and Surgical Journal*.

A CASE OF CEREBRO-SPINAL RHINORRHEA.—Dr. St. Clair Thomson, of London, presented recently before the London Laryngological Society a case in which he succeeded in demonstrating to the satisfaction of his brother specialists that the practically continuous rhinorrhea was really a discharge of subarachnoidal fluid. The discharge, except for the annoyance of its continual dropping, did not inconvenience the patient in the least. On the contrary, vague pains in the head from which the woman suffered before the establishment of the discharge have since ceased, and only return when for some reason there is a temporary obstruction to the flow. Dr. Thomson has succeeded in finding in medical literature reports of some twenty cases, which he thinks should be classified in the same category with the one he has had under observation. Most of them have been described simply as persistent "dropping of watery fluid from the nose." Beyond the fact that this is an actual cerebro-spinal rhinorrhea, very little is known. Dr. Thomson himself thinks that it is probable that the fluid finds its way from the subarachnoid space at the base of the skull, within the perineural sheaths of the branches of the olfactory nerves, though of course the possibility of its finding its way by some other route can not be denied. He thinks that the condition is always associated with increased intracerebral pressure. Of the twenty-one patients, including his own, no less than seventeen presented some cerebral symptoms, and eight of them showed retinal changes.—*Medical News*.

MOSQUITOES AS CARRIERS OF MALARIA.—The expedition sent to Sierra Leone to investigate the habits of the mosquitoes of the genus *Anopheles* has arrived at certain definite results, some of which are given by a correspondent in the British Medical Journal for September 30th. The distinguishing marks of this variety as contrasted with *Culex* are very marked, not only in the adult forms but also as a larvæ, which appears to be of

more practical importance; the larvæ of both varieties breed in water, but with the following difference:

"*Culex* larvæ, when disturbed, immediately wriggle down to the bottom of the water. On the other hand, *Anopheles* larvæ can move not only in this manner but with a few rapid jerks along the surface; indeed, this seems to be their more common kind of progression unless much disturbed, when they sink to the bottom. These details, trifling as they may appear to be, are probably of first importance as regards tropical sanitation, because it follows that pools which contain flat-floating, surface-moving mosquito larvæ may be considered to be foci of malaria.

"*Culex* larvæ live everywhere in warm countries—in almost every pot, tub, well, cistern, broken bottle, empty sardine tin, or anywhere where a little water lodges. It must be observed, therefore, that the sources of *Culex* can not well be removed by drainage of the soil, being dependent more on slovenly domestic arrangements than on any thing else. In fact, the common species of *Culex* are essentially domestic animals. Neither are they very dependent on rain, slop water, drains, garden tubs, etc., being found at all seasons. Now, as Ross has pointed out, malaria is amenable to drainage, and is largely influenced by the rainfall, while its distribution is very local and not nearly so general as that of at least the commoner species, *Culex*. Hence his inference that malaria depends on a kind of mosquito which breeds not in pots of water but in puddles on the ground.

"The recent work of the expedition has given ample confirmation of this view. *Culex* is essentially a pot-breeding mosquito; *Anopheles*, a puddle breeding mosquito—or even a stream-breeding mosquito. Hence the familiar laws of the prevalence of malaria. But *Anopheles* not only requires puddles to breed in, but puddles of a certain kind. Hence the practical importance of the subject.

"Further than this, *Anopheles* larvæ are found in puddles containing algæ. But there is more than a mere association between the larvæ and the algæ; the former eat the latter. It has been found that larvæ hatched from the egg will not grow unless given large quantities of algæ, which they are seen to devour rapidly, while the crops of the larvæ caught in the puddles are found crammed with the same weed. Hence it would appear as if *Anopheles* is, in the larval stage, essentially an algæ-eating insect, and an insect which generally, if not always, breeds in association with that vegetable.

"From a theoretical point of view these observations are of interest, because they satisfy and explain some long-known laws of the diffusion of malaria—such as the connection of the disease with rainfall and stagnant water, its disappearance on drainage of the soil, and so on. The supposed influence of turning fresh soil may be explained as being due to the formation of *Anopheles* puddles. From a practical point of view, however, the observations just given are still more important, because they enable us to avoid draining a whole malarious area, a thing which few towns in the

tropics can afford; and by teaching us how to indicate with scientific certainty the precise foci of malaria enables us to reduce the cost to a minimum by dealing only with the actually dangerous spots. A little consideration will show that level ground is almost a necessity for pools containing algæ, at least in the season of heavy rains. At present when a heavy tropical shower falls almost every six hours all the water courses with any slope are scoured out so deeply that the bare rock is exposed, while after the shower, because of the same slope, all the water, except in a few pools in the rock, drains away almost at once. Mosquito larvæ can never live in such places."

Evidently the recognition of the larvæ and their habits of life is the first step toward their extermination. If the researches alluded to above stand the test of further experience, we may certainly look for positive and efficacious prophylactic measures directed against the spread of malaria.—*Boston Medical and Surgical Journal.*

THE INCREASE OF CANCER REAL, NOT APPARENT.—Directly after the publication of Dr. Roswell Park's striking article on the increase of cancer (*Medical News*, April 1, 1899), there followed quite a discussion in the medical journals of this country and of England as to whether the increase of cancer, according to the mortality statistics, was apparent or real. A number of letters were written by those who could not bring themselves to believe that cancer is really on the increase, in which they endeavored to show that the apparent increase is really due to better methods of diagnosis. A number of obscure internal conditions that were formerly set down in the mortality statistics under various names, according to the special symptomatic condition that was most prominent in them, are now correctly diagnosed and reported as cancer.

So great is the tendency to refuse to accept what is new, when it is a surprise or has been entirely unexpected, that the majority of the profession have been rather inclined to revert to this explanation of the statistical increase of cancer. It is undoubtedly true that the gradual evolution throughout the profession of better diagnostic methods as to internal cancer has led to the addition to the cancer mortality statistics of a certain number of deaths that were formerly set down as due to other causes, but this factor by no means is sufficient to account for the greatly increased prevalence of the affection that is reported from year to year.

The statistics of the Registrar-General of England for the year 1897 have become available since the discussion in the spring. Dr. Tatham in the introduction to the Registrar's report does not accept the view that the increase of cancer in recent years is only apparent, though he admits that during the decade from 1870 to 1880 this factor probably played an important rôle in the increased number of cancer cases reported. Since then the apparent increase for this reason has been growing steadily less and less, and at the present day we surely can not say that from year to year there

is such a progressive betterment of methods of diagnosis as would add markedly to the number of cancer cases reported.

In the London Lancet for September 16, 1899, Dr. Payne makes an interesting comparison between the death-rate from cancer and from tuberculosis in the female sex during the two years at the beginning and end of the last score of years for which we have reports. In 1877 the death-rate for females from cancer was 636 per 100,000, that from phthisis was 1,967 per 100,000; that is, the cancer death-rate was less than one third that of tuberculosis. In 1897 the death-rate from cancer was 929, that from phthisis, 1,162 per 100,000, a ratio of 4 to 5; that is, cancer now causes in English women four fifths as many deaths as are caused by phthisis, a condition of affairs that is certainly very surprising, especially to those who are prone to think of cancer as a comparatively rare disease.

Some of this approach of the death-rates from the two diseases is due to the improved methods of dealing with consumption, which has made it much less fatal. The increment of nearly fifty per cent in the death-rate per 100,000 from cancer is, however, sufficiently startling to make us realize the importance of the present comparison. This death-rate, it is to be remembered, is among women, while it has been argued that it was especially the statistics of cancer among men that showed that the increase was apparent, not real. We are, then, surely in the presence of a highly-increased mortality from cancer, and this is not due to the lessened number of deaths from infectious diseases, nor to longer average life, but to actual heightened incidence of the malignant affection.—*Medical News.*

HEROIN TO RELIEVE COUGH AND CHEST-PAINS IN TUBERCULOSIS.—Dr. A. W. Beketoff (Amer. Jour. Med. Sci., August, 1899) has made use of heroin in the treatment of twenty-five patients suffering from tuberculosis, in dose of one tenth of a grain in powder or pill. In about fifteen minutes after its administration cough ceases, and sleep is possible. The respiration, especially when increased by coughing or pleuritic pain, is slower and deepened. In case of disease of the heart, or oxygen-hunger from encroachment upon the respiratory area (large cavities), this remedy is of little or no value. It has but little influence upon the circulation as regards either frequency or fullness, further than that respiration is benefited. It relieves chest-pain, and so favors sleep. Insomnia due to mental excitement is not markedly relieved. It is well borne, even if digestive disturbances exist. It is indicated in the treatment of hemoptysis because of its beneficial action on cough. Patients do not become readily accustomed to its action, and it may be administered for a month without necessity arising for increase of dose.—*Virginia Medical Semi-Monthly.*

CONGENITAL CYSTIC KIDNEYS, WITH A REPORT OF A CASE.—He saw this baby about twenty minutes after birth. It was well developed but distinctly cyanotic, breathing feebly, and the cyanosis appeared to be more marked than the heart's action and feeble breathing should produce. The

body was limp, and the child could not be aroused. Death occurred forty-five minutes after birth. The autopsy made four hours later showed a normal heart, small areas of lung tissue containing air, liver, spleen, and mesenteric glands normal, and both kidneys cystic.—*Dr. E. E. Graham, in American Pediatric Society.*

DIGESTIVE VALUE OF HEARTY LAUGHTER.—Hippocrates recommended eating at table with others and the making of conversation as gay as possible, since hilarity and laughter are the greatest aids to digestion. This he believed was a happy and rational application of physiology, of which the stomach derives the greatest benefits. Not long ago a gentleman excused himself at the last moment from attending the theater on the plea that he had then a violent attack of indigestion. "Go," said his physician friend, "by all means go, as nothing will so surely and quickly cure you as a good hearty laugh." The play was a broad farce, full of ridiculous situations from start to finish, and the result proved the wisdom of the doctor's suggestion. Long before the first act was over the patient said he never felt better in his life.—*Virginia Medical Semi-Monthly.*

SCURVY IN AN INFANT OF SIX WEEKS.—The patient was born October 12, 1898. The father was not in good health, having long suffered from chronic rheumatism, while the mother, who had a valvular cardiac disease following rheumatism, was anemic and did not recover from the effects of confinement for many weeks. The child was not strong, and when seen in the sixth week there was a well-marked condition of scurvy. The child had never taken any thing but breast milk, which was very abundant but thin and watery. So abundant was the supply that, though the child nursed frequently, it never emptied the breast, and consequently only received "fore-milk," which contains a much smaller amount of fat than does the later milk. The child was allowed to continue nursing, but pasteurized cream was given to make up the proper amount of fat, and the results were prompt and satisfactory so far as the scurvy was concerned, but the child subsequently died from an attack of pneumonia.—*Dr. Floyd N. Crandall, in American Pediatric Society.*

PROFESSOR KOCH'S REPORT ON MALARIA.—Professor Koch's first report on his study of malaria in Italy has been published in the *Deutsche Medicinische Wochenschrift*. He stayed in Grosseto, a town situated in the Tuscan Maremma, from April 25th till August 1st, together with his assistants, Professor Frosch and Dr. Ollwig, and the Italian delegate, Professor Gosio. It was a remarkable fact that new cases of malaria usually occurred only in the months of July, August, and September, so that up to July 23d the commission had the opportunity of observing only fifty-nine cases, of which five were recent, while from this date till the end of July, 222 cases were examined. In every instance the parasite of malaria was found in the blood. Apart from human blood, the parasites occurred only in

some species of mosquitoes which were met with only in the summer. The mosquitoes convey the malarial germs from one human being to another; the infection is especially maintained and propagated by the relapsing cases which continue all the year round and form the link between one fever season and the next, so that the mosquitoes in the beginning of summer always find germs. A remedy which destroys the parasites was discovered long ago in cinchona bark and quinine; it must be given not only during a fit but for a very long time, from eight to nine months, so that relapses may be avoided. If no relapse occurred in any of the cases of malaria in any given district, the mosquitoes would find no germs in the beginning of summer, and malaria would become extinct there. Professor Koch succeeded in recognizing certain species of mosquitoes in the dwellings of the population; this was the more important, as the mosquitoes of this district did not usually bite during the day, but only during the night. The inhabitants therefore became infected at night within their dwellings. In seven cases parasites of malaria were discovered in insects, especially in *anopheles maculipennis*. In many dwellings, however, where patients had contracted malaria, *anopheles* was not present, but another insect, *culex pipiens*, was hardly ever absent. Professor Koch ascertained that the so-called estivo-autumnal fevers were identical with tropical malaria. Professor Grassi, of Rome, has recently charged Professor Koch with unwarrantably claiming to be the discoverer of the spread of malaria by mosquitoes, and with ignoring the fact that the propagation of malaria in this way was made known long ago by the researches of Professor Grassi himself and other observers. Professor Koch, being at present in the Dutch East Indies, is unable to reply to these imputations, which have been aggravated by publication in a non-medical journal, the *Rome Tribuna*. It must, however, be observed that Professor Koch in this and in other memoirs speaks of the "well known" mosquito theory, so that obviously he had no intention of giving himself out to be the author of this theory.—*Lancet*.

IODINE IN ARTICLES OF DIET.—Iodine has not hitherto been presumed to be present in any important quantity in alimentary materials, but according to recent researches which have opened up a very delicate process for the detection and estimation of iodine, this element occurs certainly in the flesh of fish and shell fish in not a negligible quantity. It is true that traces of iodine have been found in cod-liver oil, which with other elements, such as bromine and phosphorus, probably exert a slight specific action and possibly a favorable influence on the asorption of the oil, thus contributing in some measure to its tonic effects. The flesh of fish is peculiarly nutritive though less satisfying and perhaps less stimulating than ordinary kinds of meat. It is able to be digested more easily and rapidly than is animal flesh, and on these considerations affords a useful food for invalids. But most fishes contain iodine, and thus the occurrence of this element

may be a factor of importance in the suitability of a fish diet for invalids. The herring appears to be at the top of the list, containing 2 milligrammes of iodine per kilogramme. Next come mussels, 19 milligrammes per kilogramme; next salmon, $\frac{1}{4}$ milligramme per kilogramme; then ling and cod, $\frac{1}{2}$ milligramme per kilogramme, and the same amount in oysters. The salmon trout appear to contain the smallest quantity, which is only $\frac{1}{10}$ milligramme per kilogramme. These results are interesting, and doubtless the inquiry will be extended to other articles of diet, though on the face of it there is more probability of iodine occurring in fish than in mammals or vegetables.—*Ibid.*

INOCULATION OF SCARLET FEVER.—A remarkable article on the above subject by the late Mr. Joseph William Stickler, M. S., M. D., of Orange, New Jersey, U. S. A., is published in the New York Medical Record of September 9, 1899. A footnote explains that the manuscript was found among the papers of the deceased physician. The material for inoculation was obtained from the throat and mouth of a patient who had a mild attack of scarlet fever. The cases inoculated were ten in all, and all recovered. The effect of inoculation was generally to produce sickness, diarrhea, rise of temperature, but not very high, some sore throat, and general desquamation, but intense desquamation and sometimes abscess at the seat of inoculation. The author in a note explains that he had hoped to find a protective virus in the inoculated mucus, but finding in each case that genuine scarlet fever developed with, in one or two cases, nephritis, he desisted. The cases seem to have been of a somewhat less severe type and of shorter duration than those occurring naturally, but the difference was obviously not such as to warrant the continuance of the very questionable experiment, to say nothing of the multiplication of cases, each doubtless capable of conveying the disease. We record the experiments, but we can not extend to them our approval or understand the principle on which they could be justified. The average duration of the period of incubation from the time of inoculation was thirty-two hours and thirteen minutes, but it varied much, from twelve to seventy-two hours.—*Ibid.*

THE ADULTERATION OF GOLDEN SYRUP.—Few articles nowadays seem to escape the subtleties of the adulterator. Perhaps the latest form of adulteration brought to light is the addition of glucose syrup to golden syrup. Glucose syrup is made by the action of acids on maize, starch, or even wood. It contains the characteristic sugar known as dextrose, and this is largely used now as a substitute for malt and cane sugar by vinegar makers, and large quantities of glucose prepared in this way are used by manufacturers of fancy sugars and sweetmeats, while it is even used to adulterate honey. We need not urge again the argument which we are repeatedly bringing forward that the purchaser is entitled to have exactly the article for which he asks. If he asks for cane sugar he should be sup-

plied with cane sugar, and not with a substitute; for olive oil he should not be given cottonseed oil; nor should any other fat be supplied when he distinctly asks for butter; and so on almost *ad infinitum*, and, we may add, *ad nauseam*. It is pretty certain, moreover, that the dietetic value of substitutes in general is inferior to that of the genuine article, and we have little doubt that this is so in regard to glucose and true golden syrup. It is probable that the dietetic qualities of the constituents of golden syrup, which are all derived from pure cane sugar, are more wholesome than the sugars chemically derived from starch and woody fiber. Recent revelations have shown that frequently golden syrup consists of equal amounts of the two sugars. We trust that a sharp lookout will be kept upon this form of adulteration, since golden syrup is a favorite adjunct to food among the poor, and further, it is decidedly nutritive itself, being quite soluble and giving little trouble to the digestive organs. It is scandalous that a pleasing and cheap article of food should be tampered with in this manner.—*Ibid.*

INFANTILE GENERAL PARALYSIS SIMULATING IDIOCY.—Dr. Toulouse and Dr. Marchand, in a recent communication to the Société Médicale des Hôpitaux (June 23, 1899), state that the fact that a form of dementia closely resembling general paralysis may occur in young children is becoming more and more generally admitted, but according to them one point has not received sufficient attention; that is, that many cases of general paralysis occurring in the very young are often mistaken for cases of idiocy. They report the case of a child who, after a short period of apparently normal growth and development, began to manifest signs of progressive dementia. There were epileptiform convulsions, inequality of the pupils, disturbances and indistinctness of articulation, and a rapid emaciation followed by death. A necropsy was made, and the post-mortem findings showed the presence of cerebral atrophy of the convolutions, adhesion of the pia-arachnoid membranes with tearing and decortication on attempts to strip them off, proliferation of the neuroglia cells, atrophy of the nerve cells, and other changes known to be characteristic of chronic diffuse meningo-encephalitis. It is interesting also to observe, as indicating the syphilitic origin of this disease, that the child's father had died from general paralysis with syphilis.—*Ibid.*

RARE(?) COMPLICATIONS OF TYPHOID FEVER.—In several recent annotations you have called attention to the "rare" complications of typhoid fever which have been recorded in England and elsewhere. The two most recent instances are "suppurative orchitis" and "multiple ulcers of the vulva." With all due deference to the expressions of authorities as to the respective rarity of the various complications of this disease, I venture to think that even the rarest are constantly met with by physicians, although they may not be reported. The result is that a few authorities publish a

series of cases and reckon the rarity of complications by their own series, taking perhaps into their calculations the few cases which from time to time are reported by others.

In support of my statement, I may mention that within the last two or three years I myself have attended patients with typhoid fever complicated with "suppurative orchitis" (one case), and "hemorrhage under the skin" (two cases, while I have lately known of a third). At the present time I have a young man in the fourth week with hemiplegia (right-sided with aphasia) from cerebral thrombosis, also a young lady who developed ulcers on the mucous surfaces of the labia majora, and on the labia minora in the second week. Here in a short period and in a comparatively small series (about sixty cases) are seen some of the supposed rarest complications.

I could mention other interesting conditions met with in the same period, such as typhoid fever in a woman seven months pregnant without abortion, etc. I may have been fortunate in seeing these "rarities," but I fancy there are many others equally fortunate. Most people, especially those who see most, do not care about rushing into print with every unusual isolated case, hence the "rarity" of the unusual.—*Dr. W. Blair Bell, in Lancet.*

BIOGRAPHICAL SKETCH: DR. GEORGE BEELER, DECEASED.

Dr. Beeler was born in Jefferson County, Ky., December 21, 1830, son of George and Hannah (Stansbury) Beeler. His mother died the same day he was born, and his father died twenty years later. He remained on his father's farm until of age, when, under the influence of a friend of the family, Mr. Simon Snyder, he entered Clinton College, a noted institution of learning. In January, 1853, the young man commenced the study of medicine with Dr. John S. Ray, of Clinton, Ky., and after the expiration of one year he went to Louisville and continued his studies with Dr. Robert Breckinridge, where he attended a session of the Kentucky School of Medicine. He then went to Lexington, where he graduated with honor at the Medical Department of the Transylvania University in March, 1855. He returned to Clinton and practiced until the following fall, when he went to Philadelphia and attended a course in the Jefferson Medical College, also graduating from that institution. He now located permanently in Clinton, where he continued to practice the remainder of his days. He became to be quite a noted physician, and did a large practice. He was kind to the

poor, and ever ready to render them medical assistance. The doctor was a member of the American Medical Association, the State Medical Society, besides local societies, and was a regular attendant. He was President of the Southwestern Medical Association several times. He was elected President of the State Society several years ago at the meeting at Henderson, and performed the duties of the office quite ably.

"Liberal he was of soul and frank of heart;
And to his dearest friends, who loved him well,
Whate'er he knew or felt he would impart."

The doctor was a prominent member of the Christian Church, and also a member in full fellowship of the Masonic order.

The doctor was married to Miss Viola Whayne, of Ballard County, November 18, 1856. Of this union there are left seven children, to wit: Mrs. Blanche Higbee, Mrs. James L. Moss, Mrs. Jennie Samuels, Mrs. Jerry M. Porter, Miss Annie Beeler, Dr. Fred Beeler, and Dr. J. Moorman Beeler. Mrs. Beeler died in July, 1894.

Dr. Beeler was not only prominent in medical circles, but was a model in a social and Christian point of view. The writer had been acquainted with the doctor for many years, and was always glad to meet him at our medical associations, where we enjoyed each other's company very much. We were together at Denver last year at the meeting of the American Medical Association, where we spent a very pleasant time. He was present at our State Meeting in June at Louisville, being the last time I had the pleasure of seeing him. The doctor died on September 9, 1899. He had not been well for some time previous to his decease. He had rheumatism, and finally had an attack of apoplexy, producing hemiplegia. He was buried with Masonic honors. He has left us, but we hope our loss will be his gain. The world, in bidding him good-bye, can truly say: "Depart in peace; you have performed your duties with integrity and honor."

"'Tis memory only that
Will cheer our lonely lot,
Still sweetly whispering through life's gloom,
Forget thee not."

T. B. GREENLEY, M. D.

MEADOW LAWN, KY.



GEORGE BEELER, M. D.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNÂ."

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H. A. COTTELL, M. D., M. F. COOMES, A. M., M. D., Editors.

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A PLEA FOR FINANCIAL LIBERALITY AND MORAL ASSISTANCE OF PUBLIC HEALTH OFFICERS.

There is no more important subject to the general public than that of sanitation and the prevention of disease, therefore the public should be liberal in the matter of supplying the health officers with sufficient funds at all times to meet emergencies that may arise. There should be no parsimonious restrictions. Such restrictions are always "penny wise" and "pound foolish." Sanitary science has made wonderful strides in the last few years, and it has all been due to the untiring labors of the members of the medical profession, who have devoted so much of their time to matters of public health, and particularly to the prevention and spread of disease. Doctors are not infallible; they make mistakes, but not intentionally. Our public health officers have, as a rule, been men above reproach; men whose reputations were at stake, hence their work has been honest and conscientious. The public should understand that the health officer of their town or State is a public guardian; that his interests are their interests, and that he is their sentinel, whose duty it is to sound the alarm when the community is threatened by an epidemic of any kind, and give them timely warning what to do and how to do. He may be able to give this warning personally, or through the family physician or the public press.

There should be no obstacles thrown in his way ; on the contrary, the laity should lend him and his co-workers all the aid in their power to assist him in his labors. Brute force rarely ever accomplishes much in connection with the public. It is to be hoped that the days of the "shotgun" quarantine have passed, and will not reappear again. True, at times in the past it seemed to be a necessity, but with our great advances in the diagnosis of disease and the means of isolation, it will not again be demanded.

The action of the citizens in New Orleans during the past summer shows what can be accomplished when there is harmony prevailing among all classes. On the other hand, the restriction of yellow fever to Key West and Miami, Fla., shows what can be done when those in authority are permitted to exercise the functions of their offices. Nothing but the most thorough discipline in Key West, Miami, and New Orleans has prevented one of the worst epidemics of yellow fever that this country has ever known. The untiring vigilance of those in charge has saved hundreds of lives and thousands of dollars. The legislative bodies of this country—county, State, and national—should take an active part in this work. Such laws as will enable all health officers to fully perform their duties without molestation should be passed. Interference with public health officers in their official capacities should be made as nearly impossible as can be. If necessary, give him the power to have insubordinate persons arrested with as little formality as possible. Give him the authority of a sheriff where it is not possible for him to readily obtain the services of that officer. This may seem unnecessary, but it is not. It can do no harm, and may do much good.

It should not be forgotten that the deadly "bubonic plague" is knocking at our very doors, and there is no telling when it may appear in our midst ; and if it should, we will need every possible aid. There can be no harm done by being ready for any emergency that may come.

KENTUCKY SCHOOL OF MEDICINE GOLDEN ANNIVERSARY.

The Kentucky School of Medicine having been organized in 1850 as the lineal descendant of Transylvania University, at Lexington, Ky., the next session, which will begin January 2, 1900, will be the golden anniversary of this renowned institution of medical learning, from which

more than five thousand physicians have graduated and are now practicing in all sections of this country. On the evening of the second of January a reception will be given to the students, the alumni, and the medical profession, to which all physicians are invited.

Valuable additions have been made to the hospital and college, and the Faculty has been increased by the election of many excellent teachers, and there are but few, if any, colleges in this country better equipped for successful didactic, laboratory, and clinical instruction.

We wish to emphasize the fact that while the medical schools in Louisville require attendance upon four courses of lectures in four separate years, they are all in a flourishing condition, so that our city in the future will sustain the same relative reputation as a great center for medical teaching that has so conspicuously characterized its past history.

HONOR TO WHOM HONOR IS DUE.

There can be no doubt that to our fellow-townsmen, Dr. William B. Meany, is due the credit of first suggesting the improvement of making artificial eyes, recently credited to Dr. Snellen, of Utrecht, by Dr. Melville Black, of Denver, Col., and Dr. Edward Jackson. The following explains itself:

The exercise of a little care with "troublesome" cases in the taking of a *caste*¹—either with dentists' wax or superfine dental plaster of paris—of the tissue walls resulting from the removal of an eyeball, and the artificial eye fabricated to meet anatomic requirements, rather than the adaptation of the tissues to a misfit or bespoke eye, may overcome the "difficulties" complained of by advocates of dangerous substitute procedures, who for reasons of their own appear unable to obtain a proper support for an artificial eye following their enucleations, and thereby displace the questionable practices commended by them.

¹ *Vide* article by the writer in the *Journal of the American Medical Association*, July 17, 1897: "Adaptation and Insertion of an Artificial Eye," etc.

Notes and Queries.

SUPREME COURT DECISION AS TO MEDICAL CONSULTANTS.—A decision rendered October 4th on this subject by the Appellate Term of the Supreme Court of New York State is of special interest, since it reopens a case. A lady stopping at a hotel having suffered an accident to her elbow, the physician usually summoned by the hotel manager was called to treat her. He was

unknown to both the lady and her husband, but was permitted to remain in charge of the case. He summoned a consultant, who came altogether six times. The bill of the hotel physician was \$70, and that of the consultant \$175. The patient's husband refused to pay, and on suit judgment for the amount was given against him in the Municipal Court. He carried the suit to the Supreme Court. A reversal was directed by the Appellate Term, in an opinion *per curiam*, Presiding Justice Freedman and Justice Leventritt stating that justice would be best promoted by a retrial, "so that the proof of the value of the services of the plaintiff and of the consulting surgeon might be more clearly established." Justice McLean also gave an opinion in favor of reversal, saying in conclusion: "There was no justification, by custom or otherwise, in plaintiff's employment of a consultant without a frank and full statement of the situation to the patient and the defendant, and learning their wishes concerning the professional persons to be brought in. There can not be properly applied to the facts shown here any custom multiplying ordinary professional charges five or ten times under the shield of a layman's ignorance, because it is subversive of justice that charges should be so largely increased by a custom not made known at all to the patient or to her husband."

The whole matter would seem to be the result of a real or pretended misunderstanding on the part of the defendant of the status of a consultant in a case of this kind. It would be interesting to see with what short shrift a similar case involving a legal consultant would be disposed of by their honors.—*Medical News.*

THE CONSUMPTION OF WHISKY.—The Investors' Review has recently given an account of the enormous consumption and production of whisky in the year ending March 31st last. The population of the United Kingdom swallowed considerably more than one gallon per head of what is called whisky. Very little of the spirit drunk, however, is of proof strength. On the proof standard test for last year the consumption reached 0.852 of a gallon per inhabitant, and aggregated 34,334,421 gallons. Nine years before the consumption was only 29,850,523 gallons, or 0.747 of a gallon per head. The consumption for last year is the highest yet reached. This does not include the spirit exported, methylated spirit, and other odds-and-ends. If these are added to the home consumption, the sum total becomes 49,381,821 gallons. Great as is the amount consumed, it does not satisfy our distillers, who produced last year the prodigious quantity of 63,437,844 gallons—an increase of about 2,785,000 gallons on the previous year's output—and the total increase in consumption was about 2,898,000 gallons. It is estimated that the total accumulations of home-made spirit, mostly whisky, amount to 151,732,539 gallons, or more than three years' consumption, and the value of this dead stock is about £35,000,000. When in a recent speech Sir Michael Hicks-Beach expressed, to the amazement of many good people, his satisfaction at the unprecedented consumption of beer last year and his

hope that it would increase, he defended himself on the view that the consumption of beer was better than that of spirit. The remedy is a very doubtful one. But the consumption of spirit is appalling. Statesmen may create for themselves theories that extenuate a national vice which yields the Exchequer so many millions sterling a year; but, speaking from a medical point of view, we must point out that it is disgraceful and disastrous. The Registrar-General in his last report for 1897, as in previous ones, leaves us in no doubt. All medical men know that the returns are not explicit on the alcoholic causation of disease, and that only the coarsest indications of the evil can be gathered from them. Yet he says: "To intemperance there were directly attributable during the year 2,397 deaths, viz: 1,460 of males and 937 of females. The male death-rate from intemperance was 97, and the female rate 59 per 1,000,000 living of the respective sexes, both rates being the highest on record." The tables given show what is so obvious to common observers—the increase of alcoholism among women. We have extracted a few items: thus, the deaths from chronic alcoholism in the year 1897 as compared with the year 1878 in men show an increase of $82\frac{1}{2}$ per cent, those of females of $145\frac{1}{2}$ per cent; and the deaths from cirrhosis in men an increase of 12 per cent, and those from cirrhosis in females of 26 per cent. The amount of disease which must be implied in such a consumption of spirit as we have described can only be estimated by medical men engaged in hospital and private practice, but the above facts concerning mortality are deeply significant. What will the Government do in the way of helping to curtail a consumption of alcohol that has no foundation in common sense and no justification in medical science?—*The Lancet*.

MOVING AGAINST CONSUMPTIVES IN COLORADO.—Active measures are being taken by the Charity Organization Society of Denver to lessen the practice of sending indigent consumptives to Colorado. It is charged that physicians in the East advise the removal of patients having no reasonable expectation of benefit from the climate of Colorado, or who have no means to support themselves while getting something to do. These people without money soon become a burden to the charitable societies, and must be supported or returned to their homes at public expense.—*Medical Record*.

"DIVINE HEALER" TO BLAME.—Dowie, the "Divine Healer," Christian Scientists, and all others of that ilk are held responsible by Chief Inspector Herman Spalding of the Health Department of Chicago for the present prevalence of scarlet fever and diphtheria among the school children of that city. "When we are notified," said he, "of a case of this character we can handle it without any great trouble, but when it is kept secret it is impossible to tell what the result will be and where it will end. The peculiar belief that teaches us to close our eyes and call upon the Lord to do the work of a doctor and sanitarian has helped ignorant parents in the work of

spreading preventable contagious diseases. The beauties of this method of treatment are to be found only in the wealth of flowers placed upon little graves.—*Medical News.*

FOREIGN PRACTITIONERS IN JAPAN.—We learn from the *Sei-I-Kwai Medical Journal* that since the new medical-practice law has come into force in Japan about sixty foreigners have applied for a license. Licenses have been granted to fifteen physicians and four dentists, and charters have been granted to seven dispensaries.—*Medical Record.*

LARKSPUR POISONING.—Two women who were patients at the Loretto Home, New York City, died on October 7th of larkspur poisoning. The drug was a solution in wood alcohol for the purpose of destroying vermin. These unfortunate women came under treatment to be cured of alcoholism. They drank the solution because it smelled of alcohol, and without any knowledge that it was poisonous.—*Medical News.*

THE PREVENTION OF CONSUMPTION.—The following resolution, signed by Sir William Broadbent, has been passed by the Council of the National Association for the Prevention of Consumption: "Having understood that apprehension is entertained as to the spread of consumption from sanatoria established for the treatment of this disease, the Council of the National Association for the Prevention of Consumption desire to express their opinion that there is no danger of communication from any well-conducted hospital for consumption, or from any sanatorium where the open-air treatment for this disease is properly carried out; and, further, that the inhabitants of houses in the immediate neighborhood of such institutions are perfectly safe from local propagation from this source."—*The Lancet.*

DYSENTERY IN JAPAN.—A dispatch to the *New York Times* states that a terrible epidemic of dysentery is sweeping over Japan with fatal results. Official statistics show that out of 50,000 persons attacked, nearly 12,000 have died this year up to September 14th. Authorities state that 100,000 cases will be recorded by the end of October. Dysentery was unknown in Japan until 1880, when it was brought by ship from abroad. That year it killed 1,300 people. Thereafter it spread steadily until 1893, when 41,000 persons perished. Out of 1,000,000 cases recorded from 1880 to the end of 1898, 247,000 proved fatal. According to the *Sei-I-Kwai Medical Journal*, Kitasato and Shiga have been experimenting with a curative serum treatment which has so far been fairly successful. At the end of August some sixty patients with dysentery had been treated in Kitasato's hospital, and of them only one had died. The experimenters claim that a cure may be obtained in almost every case, no matter what its seeming gravity, provided only that the treatment is begun early enough.—*Medical Record.*

THE death of Mr. William H. Appleton, the senior member of the firm of D. Appleton & Company, occurred at New York October 19th. He was in the eighty-sixth year of his age. Although Mr. Appleton had not

been active for some years past, he was for many years one of the prominent factors in bringing American book-publishing to its present high level. To him is due the credit of giving noted impulse to the popularization of scientific facts and discoveries. In the medical world his firm is known more especially as the publishers of the Popular Science Monthly, the American Gynecological and Obstetrical Journal, and our well-known contemporary, the New York Medical Journal.—*Medical News.*

CENTIGRADE AND FAHRENHEIT.—Dr. W. J. Swift writes: A simple and easily remembered formula for the conversion of Centigrade degrees into Fahrenheit degrees and *vice versa* is the following: $\frac{5}{9} C. + 32 = F.$
 $\frac{5}{9} (F. - 32) = C.$ —*Medical Record.*

WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.—The ninth annual meeting of this association will be held at Des Moines, Iowa, December 27 and 28, 1899. Surgeons and gynecologists of the great West are cordially invited to affiliate themselves with this association. George H. Simmons, 61 Market Street, Chicago, is the Secretary and Treasurer.—*Medical News.*

AN OPERATION ON THE CZAR.—It is reported that the Czar's skull was trephined at Darmstadt on October 14th, in the hope of relieving certain cerebral symptoms from which he has been suffering. His trouble dates from an assault which was made upon him several years ago when traveling in Japan. It is asserted that the operation was successful, though it is not yet possible to say what the ultimate benefit will be.—*Medical Record.*

RECEPTION TO DR. FLEXNER AND DR. CLARK.—The Medical Club of Philadelphia gave a reception on November 3d, at the Hotel Bellevue, to Drs. Simon Flexner and John G. Clark, late of Johns Hopkins University, and now of the University of Pennsylvania.

PLAGUE IN BRAZIL.—Plague is reported as having made its appearance in Brazil, probably having come from Portugal.

INOCULATION OF BRITISH TROOPS.—It is said that the British troops mobilized for service in South Africa have been very generally inoculated against typhoid fever.

CONGRESS ON HYPNOTISM.—The second International Congress on Hypnotism will be held in Paris from August 12 to 16, 1900, under the presidency of Dr. Jules Voisin.

STATE CARE OF CONSUMPTIVES.—At a meeting of the Section on General Medicine of the New York Academy of Medicine, held October 17th, there was a discussion on "The State Care of Consumptives," which was opened by a paper by Dr. Alfred Meyer, in the course of which he gave an

account of the Massachusetts State Hospital for Tuberculosis. On the list of speakers were Dr. Lawrence F. Flick, President of the Pennsylvania Society for the Prevention of Tuberculosis; Dr. Daniel Lewis, President of the New York State Board of Health; Edward T. Devine, General Secretary of the Charity Organization Society; Dr. Wm. H. Thomson, President of the New York Academy of Medicine; Dr. Vincent Y. Bowditch, of Boston; Dr. S. Solis Cohen, of Philadelphia; Dr. John H. Pryor, of Buffalo; Drs. George F. Shrady, Andrew H. Smith, and J. W. Gleitsmann, and a number of other prominent physicians and officials of societies.

THE EXPENSES OF A MEDICAL MAN'S MOTOR CAR.—Dr. Calbet, of Paris, has published a list of expenses for his motor car. During the year it has run about 6,900 kilometers at the following charges: Petroleum spirit (essence), 1,052 liters, 437 fr. 15c.; oil, 66 liters, 27 fr. 50 c.; lubricating oil, 3 fr. 15 c.; repairs, 1,575 fr. 10 c.; sundries, 324 fr. 10 c.; debt on purchase money, 768 fr. 50 c.; coach house and tax, 250 fr.; attendant, 1,000 fr.; total, 4,386 fr. This sum represents the total expense for one year, but the sum can not be worked out at so much per kilometer run, for both fixed and variable expenses are included. In the opinion of Dr. Calbet a well-made petroleum motor car runs easily and regularly, but to make it really economical, both the original price and that charged for repairing must come down from the fancy heights at which they now stand; nevertheless, its net cost will be found less than that of a carriage and pair. The *Auto-car* (a journal conducted in the interest of those making or using automobile carriages of all sorts), of October 7th, makes a special feature of the opinions of medical men using autocars in England, and publishes opinions from thirteen who have and are using motor cars. All agree that using a motor car works out as cheaper than using horses, but only one medical man gives the actual cost per mile run. This he says is 6d. for a horse and only 3d. for his motor. The original cost of motor cars, according to the various correspondents, varies from about £160 to £433. As to repairs, Dr. A. Charpentier has driven his car some 5,000 miles in nearly a year, and gives the cost of repairs as £26. He admits, however, that he does not include repairs owing to his having attempted "steeplechasing" and failed. Dr. Calbet's repairs, it will be noted, amount to some £60, so possibly he includes the cost of "steeplechasing." Altogether it seems that, given a user who knows something about machinery and is willing to keep an eye on his motor himself, the motor car should be a useful vehicle for the country practitioner.—*Lancet*.

THE Phosphates of Iron, Soda, Lime and Potash, dissolved in an excess of Phosphoric Acid, is a valuable combination to prescribe in Nervous Exhaustion, General Debility, etc. Robinson's Phosphoric Elixir is an elegant solution of these chemicals. (See advertisement in this issue.)

THE AMERICAN PRACTITIONER AND NEWS.

"*NEC TENUI PENNĀ.*"

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—*RUSKIN.*

Original Articles.

SOME PHASES OF PUERPERAL INFECTION.*

BY A. MORGAN CARTLEDGE, M. D.

Infection of the uterus following miscarriages, abortions, and labor at full term constitutes one of the most important phases of gynecologic practice. Fortunately this condition, so fatal to women, is yearly growing less frequent, as the causation and prevention are better appreciated by those engaged in obstetrical practice.

Accidents and the ignorance of criminal abortionists still furnish enough cases to invest the disease with a keen interest.

Though much has been written in the past decade upon the treatment of acute puerperal infections, we are far from possessing a settled line of practice. The advocates of curettage and drainage affect to arrest all cases when seen sufficiently early, while those who prefer uterine irrigations and tubular uterine drainage claim the same good results. The explanation of such statistics is not far to be sought.

A man may have a large experience and yet a very uniform one so far as the nature of the cases he encounters is concerned. I believe we are justified in asserting that none of the ordinary methods of practice, however early and faithfully carried out, can cope with certain forms of acute organic infection of the uterus.

The great practical difficulty consists in determining the cases which demand the most radical measures, and those that will yield to less heroic treatment. If the case is observed early in its progress, we

* Read before the Louisville Medico-Chirurgical Society, October 6, 1899. For discussion see p. 382.

may have time to make the trial of mild methods of treatment—curetage, irrigation, and drainage—before resorting to hysterectomy should these fail. When seen late, time may not permit of this trial, but force us to a difficult decision at once.

We all know upon what a slender and short string the life of a patient with profound sepsis may hang, and action must not only be thorough but very prompt. It has only been a few years since so radical a method as hysterectomy was practiced in the desperate cases of this infection. This is not to be wondered at when we consider the great hazard of performing a major and difficult operation under such unpromising general and local conditions. That the operation is justifiable as a life-saving measure all admit at the present time.

The mortality will always remain high, as compared with removal of the uterus for other conditions, and we have not the satisfaction of making it much lower by the ancient admonition of "operate early," for this procedure must remain in the category of *dernier ressorts*.

As I said to a professional friend once, I did not think hysterectomy for acute puerperal sepsis was a method likely to be abused to gratify operative ambition, for the mortality is necessarily too great.

Per contra, I do think we should have the courage of our convictions, and in hopeless cases give the patient the benefit of the operation. My experience leads me to believe that the infection atrium of a lacerated cervix is by far the most frequent site of the implantation of septic germs in puerperal infection. If originating above this point, it would seem almost positive evidence that a dirty fingernail had been scratching the endometrium in an effort to dislodge placenta or membranes. Implantation of either the staphylococcus pyogenes aureus or the streptococci in an abrasion of the cervix or uterus gives us true puerperal sepsis or infection, in contradistinction to the invasion of blood-clot or retained membranes by saprophytic bacteria, which, though giving rise to active ptomaine poison, is quickly relieved by thoroughly cleansing the birth canal of decomposed blood-clot and membranes.

True or organic infection in a wounded cervix pursues a very different course, according as the infecting organism is the staphylococcus or streptococcus.

In the first, the tendency is to spread slowly and to localize as abscess formations in the glands immediately beside the cervix. Such cases, treated early by cleansing and drainage, usually terminate in

recovery, or at most a slowly-forming tubal or pelvic abscess. Not so with the streptococcus infection. Repeated rigors, fever and sweat, together with all the evidences of profound general sepsis, such as mild icterus, tympany, rapid pulse-rate, and great nervous excitation too plainly indicate the nature of the poison. It is in the cases of this class that I would advise hysterectomy if other measures had failed. The vaginal method should be selected.

Rapid but as thorough sterilization of the vagina should be made as possible. The septic uterus, after being irrigated with one to two thousand bichloride solution, should be packed with sterile gauze. Forceps should be used in preference to ligatures, to save time and to prevent the certain infection that would attack the ligature sites in case they were employed.

In 1895 I reported to the Southern Surgical and Gynecological Association at Washington, D. C., two cases with specimens of hysterectomy for multiple abscess of the uterus occurring in puerperal sepsis, with one recovery and one death. They were among the earliest of the reported cases. Since that time a number of cases have been reported. I did my first two by abdominal section, believing as I did that the condition of the uterus was associated with marked tubal involvement. This I found not to be the case; the enlarged and abscess-ridden uteri were standing unadherent in the pelvic cavity, the peri-cervicitis and cellular tissue involvement rendering a diagnosis of the tubal state impossible. These specimens did much to change the views of American gynecologists as to the method of extension of the infection in such cases. They at least showed that in many of the virulent streptococci infections, if the patient survived long enough, the infection spread directly by lymphatic avenues through the uterine wall, forming sub-peritoneal abscesses, the patient finally dying of pyemia, and that the tubes and ovaries might escape entirely, as was the case in the specimens shown.

The position taken by Pozzi, that subperitoneal abscesses do not form in puerperal sepsis, can only be accounted for by the fact that the operation of hysterectomy for this condition is so recent in France as to have precluded an opportunity for him to witness this most interesting pathologic condition. Most of the patients who die of puerperal fever do so in the first week of the disease and before such abscesses form, hence autopsies would not offer a favorable way of revealing them.

I wish to present to your notice this evening a specimen with report of a case which is of exceeding pathologic interest, as representing another phase of acute puerperal infection of the most virulent type, and which I believe you will agree with me would have been most speedily fatal had not the radical measure of hysterectomy been performed. I must crave your indulgence for reporting the case thus early, but I feel should the patient disappoint us in her promise of recovery, the specimen and results up to the present time vindicate in a striking way the wisdom of the procedure.

The patient from whom this specimen was removed, a lady aged twenty-two years, came into the hospital one week ago; I was in the hospital at the time she was brought into the ward. I understood it was an abortion case, and was told by the patient that the fetus had been passed, but the afterbirth was still retained, and she was brought to the hospital on this account. It was supposed to be a pregnancy which had advanced to three or four months. I was in a hurry and did not examine the patient, but gave the interne, Dr. Woodburn, some instructions as to sterilizing his hands, telling him to examine the woman and remove the placenta, which he would probably find presenting in the vagina; if not, to watch her carefully if every thing seemed to be in good condition and wait a little while until the uterus should crowd the placenta down; if he had reasons to believe the placenta was adherent, to remove it by the method with which you are all familiar. I also cautioned him about needlessly interfering with the processes of nature, etc., if every thing appeared to be normal. In Dr. Woodburn's examination of the patient after I left he found the fetus between her legs in such an advanced stage of decomposition that the odor was exceedingly foul and offensive. Whether it had been born on the way to the hospital in the ambulance, or whether it passed after she had been taken into the ward and put to bed, we do not know. He severed the cord, and could feel the edge of the placenta, it being in no way detached. There was no great hemorrhage, so he had a bichloride douche given, and the patient was put to bed. That evening she had a chill and began to bleed. He telephoned me and said he thought he could remove the placenta; that the patient was bleeding. I told him to go ahead and do so. Assisted by one of the other internes he removed the placenta with a fair degree of success, as the ultimate record shows. Hemorrhage was checked after this was done. He washed out the uterus with a 1-10,000 bichloride solution,

because the odor was so offensive, putting a light tampon in the vagina, extending out the vulva so as to drain the parts thoroughly. As stated, she had a chill that night; her pulse rapidly went up. On Monday her temperature was 101.5° F., pulse 120 to 124. I did not see the patient, I am sorry to say, on Monday, but Dr. Woodburn conferred with me, and I told him probably an intra-uterine douche every four hours of bichloride solution 1-10,000 or 1-20,000 would be all that was necessary.

I saw the patient first on Tuesday morning, October 3d. I found her with a swollen abdomen, considerable tympanites, slight jaundice about the conjunctivæ and skin, pulse 128, temperature 101.9° F., with a haggard expression, and altogether in a most unpromising condition. I told Dr. Woodburn that we would at once get her ready for thorough curettment and drainage. It was thought that possibly some of the membranes had been left and a thorough curettage would be advisable. The patient was placed on the table for this purpose, and as soon as she was under the influence of the anesthetic a careful examination was made. The discharge from the uterus was very offensive, and with the patient in the dorsal position, after introducing a retractor beyond the sphincter muscle, it was found that the cervix was torn posteriorly down about the internal os. She had rather a liberal cervix, but there was a slit in the center posteriorly. I was inclined at first to think that possibly Dr. Woodburn had produced this tear in removing the placenta, but he assured me that he had encountered no trouble in its removal; that he had followed my directions, and the placenta was easily taken away. It then occurred to us that a criminal abortion had been performed upon the woman. The cervix at the posterior lip was in a gangrenous state; it was green; and there was a horrible, putrid, grumous fluid escaping from the uterus. I had no difficulty in dilating the os sufficiently to carry in a curette, and began going around the uterus, scraping the endometrium carefully; presently I found up in the left cornu of the uterus a soft substance which I thought must be some of the placenta, but as a part of it was scraped off and removed I saw that it was not placental tissue, but seemed to be gangrenous portions of the uterine wall. To use the common expression, I then saw that we "were in for it;" that it was no use to leave the woman with a uterus in this condition, with a gangrenous cervix. I had intended to thoroughly curette and pack the uterine cavity, trimming off the gangrenous portions of the cervix, bringing the edges together with

stitches, and establish drainage. But the curette showed that the uterus was probably in a state of acute septic necrosis, so the operation I expected to do was out of the question. I asked for the broad ligament forceps, and decided that I would go ahead and remove the uterus at once. On incising the posterior cul-de-sac in order to get in behind the uterus, between half a pint and a pint of turbulent serum gushed out from the peritoneal sac, showing the beginning of a pelvic peritonitis very much like I have seen in certain stages of appendicitis. I rapidly removed the uterus, and, as I had suspected, there was absolutely no involvement of the tubes or ovaries, and the peritonitis had simply resulted by the sepsis extending from the infected uterus; no adhesions had taken place.

The uterus was removed in twelve or fourteen minutes, and a liberal packing of gauze placed in the cavity.

The specimen is one of extreme interest, showing what a case like this may be expected to do if left for a few hours without operative intervention. In removing the uterus I was particularly struck with its color, and had hoped to preserve this by the Kaiserling method, but it has not remained for a sufficient time in the solution. Some of the gentlemen present saw the specimen before it was put in the preserving fluid, and will remember its condition. The fundus was as green as the skin of a bean pod; the color can still be seen from the necrosis; it is in a sphacelous condition, especially at the left cornu; the lacerated cervix has been dilated and pulled down, but the gangrenous portion can still be seen. The tubes and ovaries were healthy. I believe the Kaiserling preserving fluid will eventually bring these tissues back to their original color.

The patient has done better since the operation than we hoped for; her pulse and temperature fell soon after the operation was completed. The infusion of saline solution was practiced. While she did not lose much blood from the operation, as little as would be lost in a vaginal hysterectomy, still she had already lost considerable blood, and, sepsis being present, we used saline solution liberally injected subcutaneously about the breasts. We kept her bowels open. Her temperature is now less than 100° F., pulse about 100; her bowels move freely, distension diminishing; there has been no vomiting, and this is the fourth day since the operation. So it looks as if she would recover. I believe if this woman gets well we can safely say that we have saved her life, because she was simply overwhelmed with sepsis of a most

violent form, with a rapidly swelling abdomen, pelvic peritonitis, and this gangrenous uterus. I think we can safely say that this woman would have died of general sepsis within forty-eight hours had the operation not been performed. I am inclined to think she will be saved. (Has since entirely recovered.)

This is a new phase, and it is probable that in such cases as this we will not frequently see such violent sepsis where the operation of hysterectomy is justifiable. We will have a large mortality, at the same time the saving of a life that in my judgment was absolutely doomed under such circumstances I believe justified me in the attempt. I would like to hear an expression from the Society, especially upon the methods usually employed in these cases in the treatment, whether they prefer gauze to tubular drains, whether they believe in curettment, etc. Personally, outside of a blunt curette for scraping off the membranes or portions of adherent placenta, I do not believe much in cases of infection going in with a curette and scraping the endometrium, making fresh, raw surfaces for an extension of the morbid processes, and I can see how it might do a great deal of harm. The practice of curetting, which is so much lauded, can be of very little utility in cases of organic infection. It is all right in sapremia, where you have an infected blood-clot, where you want to get this away, where you have an excellent pabulum for the saprophytic bacteria that may give rise to poisonous toxins, etc.; but where you have a true progressive sepsis, not only giving off toxins, but have the multiplication of bacteria, then the curette can only make matters worse. Thorough irrigation in most of such cases would do better than breaking up the endometrium and making fresh, raw surfaces with the curette.

LOUISVILLE.

DIPHTHERIA: ITS IDENTITY AND TRANSMISSIBILITY FROM LOWER ANIMALS TO THE HUMAN SUBJECT.

BY WILLIAM B. MEANY, M. D.

Almost nothing is with certainty known of the beginning of diphtheria, though much has been learned respecting conditions favoring its spread, and something, perhaps, of influences fostering its virulence. The earliest cases in an epidemic of diphtheria are frequently very mild, and thus easily escape recognition. The first persons to die (almost invariably children) are generally supposed to have suffered

from "croup," and very likely at the commencement of an epidemic of diphtheria has the appearance mainly as a local disease, killing rather by suffocation than by general blood-poisoning.

In cities and towns diphtheria, beginning in the above fashion, is, without doubt, propagated by personal communication, especially by association of children in schools; and, seemingly, at school slight cases of diphtheria, and cases that are convalescent, get opportunity for passing on the malady, with great addition of intensity, to other persons.

It has been found, too, that when a school has been closed on account of the prevalence of diphtheria among the scholars, the disease sometimes recurs again and again after the reopening of school, as the result of the premature return there of children convalescent or seeming quite recovered of their illness. No child or person should be permitted to return to school until at least a month, or, better, six weeks' time, has expired from the commencement of actual convalescence; or any one coming from a sick-room until strictly modern methods of disinfection have been employed, with especial regard to personal hygiene, not only bodily, but of the wearing apparel of the individual as well. All school books and other paraphernalia or clothing that may have been brought into the sick-room, or handled by the sufferer from contagious affections, or during the time of convalescence, should be destroyed by incineration.

Of other influences tending to enhance the severity of diphtheria, unwholesome circumstances of dwelling have been thought of as especially potent. Thus overcrowding, badly trapped drains, and damp walls and floors have been cited as influencing the course of attacks of the disease unfavorably.

But cases of diphtheria occur for which neither personal communication in the school nor any of the above conditions hereinbefore mentioned can be assigned as probable causes. There are cases especially difficult to account for, from the very fact that they are confined to one or two families; and we can not compare the daily life of those who escape and those who are attacked to see in what respect all the inmates of a household have differed, and so arrive at the cause of the mischief. Nor have the children been in contact with the toys and playthings of former children who have suffered from diphtheria. It is of these cases that I desire more particularly to speak.

Relation of Human Diphtheria to Diseases of Lower Animals. An hypothesis of relation of human diphtheria to disease of lower ani-

mals is by no means a gratuitous one; on the contrary, it has much to recommend it. Thus communication of anthrax and glanders from lower animals to man has long ago been established, and we know of the transmission to the human subject of scarlet fever, diphtheria, and enteric fever by cow's milk.

Without a clear comprehension of the factors that produce disease in individuals, attempts at prevention must be what a great deal of our so-called preventive medicine is—a mere sisyphean waste of time. Now, the various orders of animated nature are so interdependent in regard to causation and spread of disease that it appears unwise to limit our investigations to any one family or class. That diseases are not infrequently traceable to lower animals, such as cats, dogs, various species of the feathered tribe, or other so-called house pets and household pests (rodents), is unquestioned. Investigation into the origin and spread of scarlet fever and other contagion sufficiently illustrates this point.

I am encouraged, therefore, in what follows to be content with drawing attention to none but broad clinic and pathologic resemblances between maladies of lower animals and diphtheria in human subjects.

In 1886 Dr. George Turner's (London, Eng.) experience, obtained in the course of inspection made for the local government board, says in the year 1882 a pigeon was brought to him for dissection, and to his surprise—as he hoped to find strongles in the trachea—the whole of the windpipe was found to be covered with a well-marked, consistent membrane, which hung loosely in the tube like a wind-sail, just as one may see it in the body of a child who has died from croup. A healthy pigeon was inoculated with this membrane and a disease of similar character resulted, showing that the disorder was communicable, and he noticed that the affection extended up into the eyes of the pigeon through its nostrils.

In 1883 an epidemic of diphtheria occurred in the village of Braughing, Eng., connected with a farm on which the fowls were dying with a disease seemingly identical with that above referred to as affecting the pigeon; and diphtheria made its appearance on other farms, where it was preceded by a similar affection among the fowls. "At a neighboring village, too, a man bought a chicken from an infected farm; he took it home, and diphtheria broke out in his house shortly after. This was the first case in that village." Dr. Turner says his attention was called to these facts by the medical attendant, and the man himself corroborated the information in all particulars.

Dr. Turner further states in his official report that he has seen chickens and pigeons which had been inoculated with diphtheric membrane from a child's throat attacked with a disease in all respects resembling what he regards as natural fowl diphtheria.

M. Paulinis mentions an epidemic of diphtheria in 1884 which followed the arrival of a flock of turkeys in Skiatos, one of the Grecian isles, where no case of the disease had previously been known for thirty years. Some of the turkeys were sick, and it is believed that the diphtheritic germs were conveyed from them to the first human victim.

Infection Spread by Cats. Some curious facts, showing that domestic animals are capable of spreading infection, are recorded on the sustained prevalence of diphtheria in Enfield, Eng., by Dr. Bruce Low, of the local government board. He incidentally states, says the Sanitary Record, that during December, 1887, and January, 1888, there was a large mortality among cats, so much so that the dustmen ("ashmen") said that they had never remembered seeing so many dead cats in private dwelling dust (ash) heaps before. The following incident occurred at Enfield at the time, and shows the possible connection between diphtheria in children and in cats:

A little boy was taken ill with what turned out ultimately to be fatal diphtheria. On the first day of his illness he vomited, and the cat which was in the room at the time licked the vomit on the floor. In a few days (the child meanwhile having died) the animal was noticed to be ill, and her sufferings being so severe and so similar to those of the dead boy, the owner destroyed her. During the early period of its illness this cat had been let out at nights in the back yard as usual. A few days later the cat of a neighbor who lived a few doors further off was noticed to be ill. It had also been out in the back yards at night. This second animal, which, however, recovered, was the pet and playfellow of four little girls, who, grieved at the illness of their favorite, nursed it with great care. All four girls developed diphtheria, the mother being convinced that they got it from the cat, and, indeed, no other known source of contact with infection could be discovered.

Dr. Turner states that on one occasion when called upon by the local municipal board of Brent Pelham, Eng., to investigate an epidemic of diphtheria at that place, he found in the cottage in which the first cases occurred a pet kitten had previously suffered from a

throat affection, which was attended by swelling of the neck, foul discharges from the nostrils, and "running" at the eyes.

Similar accounts are received from abroad as well as in this country, so that the identity and transmissibility of diphtheria from lower animals to human beings seems very probable. A disease has been observed in swine, sheep, horses, cattle, and dogs which appeared exactly similar to human diphtheria. May I here incidentally state that hair, fur, wool, and feathers are active carriers of infectious material? I have in these desultory remarks avoided earth, air, and water, not because I think the subject either unimportant or already exhausted. I can not conclude, however, without adverting briefly to the subject of contagious diseases and the principle of isolation now so generally insisted upon by sanitarians.

In 1887 I witnessed London rid herself of an epidemic of scarlet fever which had prevailed there to an alarming extent for some three months. The Metropolitan Asylums Board had equipped itself with a number of hospitals, and was able to let it be understood that a refuge was ready for any one who could not with safety to themselves and others be nursed at home, and thus isolation has been found not to be impracticable by the processes at the command of health boards.

Even though many of the wealthy classes of London sent their children, yet even among this class the need of isolation is yet insufficiently appreciated, and the art of maintaining it is too little studied for the arrangement of a private house to insure against the diffusion of contagion.

Until private dwellings or sick-rooms are much more methodically ordered than they are now, popular sentiment had better be educated to admire rather than condemn the growing disposition of persons in good circumstances as well as in bad to go where they will not poison others, and will incidentally be rewarded by being more surely healed than if they stayed at home.

In certain diseases depending on a known specific poison the laws governing the multiplication of such poison, the condition under which it can retain its infectivity, the pabulum, so to speak, on which it lives, the vehicles by which it is distributed, all demand more attention than they have received. Do all the so-called filth diseases, many of which are said to be contagious, really require isolation? Is it not the filth which should be isolated, and not the unfortunate sufferer from filthy environments?

When all existing doubts have been removed, and when we are able to say, unhesitatingly, here is a case in which neither disinfectants or the utmost attention to cleanliness will safeguard the healthy if brought in contact with the sick, the consent of the people to enforced isolation will no longer be withheld.

LOUISVILLE.

A REPORT OF TWO HUNDRED AND SEVENTY-SIX INTUBATIONS.*

BY W. B. PUSEY, M. D.

I submit herewith a report of two hundred and seventy-six intubations done for the relief of membranous laryngitis. The cases are classified according to the age of the patient, and the percentage of recoveries for the different ages is given. Of the whole number, 134, or 48.5 per cent, recovered.

There were thirty-five under two years of age, of which twenty-three recovered, a percentage of 65.7.

In view of the commonly accepted belief that the younger the patient the fewer its chances, this percentage is at least unique. The youngest of my cases were eight months of age; of these there were four, three of which recovered. There were three others under one year of age, with two recoveries. Nearly all of these children were at the breast or bottle-fed, which fact certainly had something to do with the very satisfactory results.

In many cases trouble comes from improper feeding, it being a difficult matter to teach the attendants and the patient the proper method; but with infants at the breast, when the mother is once shown how the little one should be fed, it is not likely that a mistake will be made.

There were 44 cases two years of age, with 18 recoveries, or 40.9 per cent. Between three and four years there were 105, with 46 recoveries, or 43.8 per cent. Between five and seven years there were 78, with 38 recoveries, or 48.7 per cent. Between eight and nine years there were 12, with 7 recoveries, or 58.3 per cent. Between ten and twelve years there were 2, with 1 recovery, or 50 per cent; and over twelve there was one who recovered.

The greatest mortality is between the ages of two and four years, an age at which the child can offer decided and effective resistance, and is still not old enough to be amenable to persuasion.

* Read before the Kentucky State Medical Society.

In the last seventy cases in this report antitoxin was, with few exceptions, given. The greater number of them were seen only when the relief for laryngeal stenosis was imperative. In some the antitoxin had already been given, but had apparently had no effect in staying the progress of the trouble. In others, whose condition demanded immediate relief, the antitoxin was given after the insertion of the tube, and in these cases the tube was removed on the third to fifth day, whereas without the antitoxin it would have remained in from five to eight days. There have been several of these cases in which antitoxin was given where the tube has become occluded by the membrane. In a few the tube was coughed up and found to be completely blocked. In two cases the tube was removed after death and found closed by the membrane, and in one case the tube was removed when the patient was all but dead, and from the condition of the tube it seemed that what air entered the child's lungs must have gotten in around the tube.

In many cases of membranous laryngitis the necessity for operative interference could be obviated by the administration of antitoxin if given early enough; when there is marked hoarseness and incipient dyspnea, even when there is decided dyspnea, calling into active play the accessory respiratory muscles, it sometimes acts as if by magic, but unless the case is under close surveillance and within easy reach it is not well to risk the latter condition. The most common accident that has occurred in this series is the pushing of the membrane down before the tube. It has happened several times, but in one case only was it attended by serious results.

Ordinarily the condition is immediately recognized, and the string being still in position the tube is withdrawn, and the first expiratory impulse brings up the offending membrane. In the one case mentioned this did not occur, and it was only after more than an hour's effort that it was dislodged by means of a loop of malleable wire. Of course the impaction could not have been complete. But the frequent introduction of instruments by the side of the membrane gave a chance for some air to enter the lungs. This patient died five hours later from exhaustion.

It sometimes happens when the tube is removed that the stenosis recurs, and it is necessary to reintroduce the tube. This may occur almost immediately, and for that reason it is best to have another tube prepared.

In a number of cases in this report the tube was reintroduced from one to twelve times, but in one case only was it impossible to leave it

out. This was a case, three years old, of malignant diphtheria, with membrane in nose, pharynx, on tonsils, and in larynx. The antitoxin was given, but in a few hours, the dyspnea having increased greatly, the tube was inserted. On the fifth day it was removed, but on account of the great difficulty in breathing it was almost immediately reintroduced. From that time on it was removed at intervals of from three to nine days, never being left out longer than forty-five minutes, usually from five to fifteen minutes, until it had been removed twenty-eight times. The last three times the tube was removed there was such difficulty in replacing it, on account of the great swelling and obliteration of the landmarks, and the child came so near dying each time, that a tracheotomy was decided upon. The tracheotomy tube has now been worn about one month. All efforts to leave it out have so far proven futile.

LOUISVILLE.

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Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, October 6, 1899, Thomas C. Evans, M. D., the President pro tem., in the chair.

Barton's Fracture. Dr. A. M. Vance: I exhibit an X-ray photograph of the forearm of a man forty-five years of age who came to me two weeks ago. He had fallen on the street after slipping up on a banana peel. He said that he fell upon his right hand, but when he came to the office there was no displacement of the bones of the wrist, nor was there any swelling. Dr. Nettleroth, who examined the man in my office, said that he thought there was a fracture, but was unable to make out any of the distinct signs. A temporary support was put on, and I saw the man the following morning. The swelling was great, there seemed to be no displacement, but there was considerable tenderness about the radius. I suspected that the radius was broken. The man was sent to Dr. Butler, and a fluoroscopic picture was taken, which I saw, and I very much doubted the possibility of a fracture because there was no displacement or other sign of fracture. However, I treated the case as one of fracture. The next day a plate was

*Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

made, which also showed no evidence of a fracture, but the print shows it to be a Barton's fracture, the second one that I have ever seen. There is also a fracture of the styloid process of the ulna. There was no displacement, and the case illustrates that a print is necessary oftentimes to make out a fracture when the fluoroscopic picture is not distinct.

I remember about ten years ago having an opportunity to get a post-mortem examination on a woman who had sustained an injury to the wrist, and a specimen of Barton's fracture was obtained. The case reported to-night is the second case in which I have seen this condition verified, but I doubt not this form of fracture occurs much more often than the text-books lead us to believe or than we suspect ourselves.

Discussion. Dr. T. L. Butler: As Dr. Vance stated, we looked at this man's arm through the fluoroscope, and could detect no evidence of a fracture. Every thing was in perfect position, as the photograph shows. After taking the picture and developing it, I again overlooked the fracture, not that the negative did not show it, because it does upon close examination. But I examined the negative before it was dry, and sent word to Dr. Vance that there was no fracture. It was not until the print had been made that it could positively be seen that there was a fracture, and then on close examination of the negative it could be distinctly seen. The picture exhibited was taken with the splints on, which prevents it being as plain as it would have been otherwise.

Dr. A. M. Cartledge: I would like to again call attention to the fact that the X-rays introduces an entirely new phase to the subject of fractures, so far as the medico-legal status of the thing is concerned, for it shows up fracture after fracture that we could not determine by any of the ordinary means. I reported several cases some time ago where a fracture was suspected but could not be definitely determined by the usual methods of examination, and the X-rays showed it to be present. In one case there was a fracture of the wrist shown by the X-rays, when it appeared from a physical examination that there was but a dislocation with possibly rupture of some of the ligaments. In another case it appeared there was a fracture of the radius; the X-rays showed that there was a fracture of both bones below the elbow. We should impress upon the lay mind as much as possible that we can not always diagnose a fracture, because somebody may bring around an

X-ray machine afterward and demonstrate that a fracture is present, which puts us in a bad light. I think the time is coming when we shall all have to put these machines in our offices for use in every case of suspected fracture, as well as in many other conditions.

Ovarian Cysts. Dr. A. M. Cartledge: I have encountered two cases of ovarian cysts within the last ten days which present some peculiar features.

Case 1. The first case was a young girl, not quite fifteen years of age, who first noticed the presence of a tumor within the abdomen about January 1st of the present year. The tumor had grown very rapidly until it filled the entire abdominal and pelvic cavities, pressing the diaphragm upward and causing enormous distension of the abdomen. Her feet were swollen, and, as far as we could judge in a negress, there was well-marked cachexia; roof of the mouth and lips pale, and there was considerable emaciation.

This girl had the facial expression of an ovarian cyst, and, while examination showed it to be fluid, there was such great tension of the abdomen that it was impossible to get any sensation by palpation of the cyst wall beneath, making the diagnosis somewhat difficult. The ordinary physical differentiation between ascites and an ovarian tumor was fairly well present, *i. e.*, the examination showed that there was a tumor in the anterior aspect of the abdomen. I could detect a little resonance on one side, but even an ascites may be so tense at times that this will be the case. Examination per vaginam seemed to show that the uterus was displaced to the left slightly, although this examination was extremely difficult to make.

The diagnosis of ovarian cyst was made and the patient operated upon. My incision came immediately down into the tumor sac, for the simple reason that it was adherent everywhere in front to the parietal peritoneum, and an enormous volume of fluid was liberated in this manner. The sac was then separated, and this enormous one-sac tumor was found to have its origin in a small dermoid of the right ovary not larger than my fist, with hair, bone, and structures of this nature in it.

The case is a little out of the ordinary in that this enormous cyst has formed within the last ten months. I do not believe that I exaggerate when I say that the cyst weighed seventy-five or eighty pounds.

Case 2. The second case was operated upon the same day, the patient being a woman forty-six years of age, whose facial expression was that of carcinoma. She looked pale; one could almost see through her ears; her pulse was weak; she had a bronchial cough which she said had been present since she was a girl; she was not able to walk up a flight of stairs, and was altogether a very unpromising subject.

Diagnosis of an ovarian cyst was easily made, because the abdominal walls were relaxed, and the cyst could be felt through them. As already stated, there was great pallor, a feeble pulse of 130 to 140 to the minute, and the cough, which she said was no worse than it had been for twenty-years, all of which were interesting and puzzling features of the case.

I operated upon her, and found the explanation of this woman's marked anemia was that there had been a great hemorrhage into one large sac of the multilocular cyst; she had bled at least half a gallon probably within the last two or three weeks, as there was an enormous blood-clot which seemed to be fresh. I have frequently seen evidences of hemorrhage into the sac of an ovarian tumor, discoloring its contents, especially where the tumor had rotated around its pedicle, but have never before seen such an extensive hemorrhage as this into the sac.

There has not been an untoward symptom in either case, and my only reason for reporting them is that they are a little out of the usual run. The stitches have been taken out in both cases; this is the tenth day since the operation, and the patients are practically well.

The Advisability of Inducing Premature Labor in a Syphilitic with Prolapse of the Uterus and Bladder. Dr. T. S. Bullock: Dr. Windell asked me to see a case with him ten days ago, a woman about twenty-five years of age. She had been under his care several years ago for specific trouble, and in the interim she has had several vulvo-vaginal abscesses. The right labia is very much infiltrated and swollen; the lower portion is indurated and of a dusky red color; there is no fluctuation and no evidence of any suppurative process at the present time, but the tissues seem to be of very low vitality. She had a baby four or five years ago, and has had several miscarriages since. When her baby was born the labor was extremely difficult, and she sustained almost a complete laceration of the perineum.

I found upon examination of the patient that the bladder was prolapsed; she had quite a large cystocele, with the condition of the

perineum before described. I found further that she was pregnant probably seven or eight months, and the physiological changes which take place in the mucous membrane of the vagina were markedly exaggerated, so much so that the tissues were almost black. I told the doctor that I would like to examine the patient further, and had her come to my office subsequently. When I put her in the chair for examination I found that the uterus for at least one third above the internal os was prolapsed, the bladder being dragged down with it, and the woman was in a most distressing condition. She could not assume the erect position without this pregnant uterus coming out, and I feared if this condition of things were allowed to continue that there might be quite an amount of destruction of tissue of the right labia—in fact, I did not know what the result would be to the mucous membranes. She has constant pain from interference with the bladder, and I have been seriously considering the propriety of inducing premature labor. She is syphilitic; she has had a large number of miscarriages; and it seems to me, in view of the fact that great pressure would be incidental to labor, that the woman would stand a better chance to escape destruction of tissues which would in all probability follow labor at term, if labor is induced, and I would like to hear an expression of opinion from the gentlemen present. I have talked over the matter with two or three of my medical friends, and they agree with me in the course of procedure that I contemplate, viz: the induction of premature labor.

Discussion. Dr. F. C. Simpson: I saw the patient with Dr. Bullock and agreed with him that the only thing to do was to bring on premature labor. Fully one third of the pregnant uterus was protruding through the vagina, and if this woman is allowed to go on to full term, when labor pains come on the uterus pressing upon the soft parts will probably produce a great deal more destruction than is present now. The entire vagina, and especially the right vulva, seemed to be in bad condition, and I do not see any thing else to do except to induce premature labor for the safety of the patient; and I agree with Dr. Bullock that this procedure under the circumstances would be entirely proper.

Dr. T. S. Bullock: It seems to me that the chances would be against the birth of a living child at term; and if labor be induced, even by the use of an incubator my experience is that the premature child seldom survives. It may live a week or longer, but finally dies.

The case resolves itself into this: You must either keep this patient in the recumbent position, keep her in bed with a tamponnade in the vagina, or you must induce labor. Confinement in bed might make the labor a little more prolonged, but I do not know that it would have any other effect, because there is no obstacle to the discharge of the child's head after it had become engaged in the pelvis. The uterus is low down, the bladder is dragged far out, and of course there would be no obstacle to discharge of the head because of the ruptured perineum; how it would be before this stage of labor had been reached I am unable to say.

Dr. J. G. Cecil: Dr. Bullock's report calls to mind a case similar to this which occurred during my service in the obstetrical clinic of the University of Louisville several years ago, this being the only case that I have seen similar to the one reported. The case was that of a woman, previous history unknown; I think she had borne several children; she was over thirty years of age. She presented herself at the clinic with a large protrusion through the vulvar opening, certainly as large as my fist, with a hole in it into which I could introduce my thumb. I examined it thoroughly, and finally concluded that it was a prolapsed uterus. She gave no history of pregnancy, but seemed to be suffering greatly. She had walked to the clinic. There was nothing to be seen except a rupture of the perineum and the uterine prolapse mentioned, which seemed to be entirely of the neck of the uterus; that is, the body was in place and enlarged, pregnancy being not more than four months advanced. The body of the uterus could be made out distinctly above the pubes.

The case was puzzling to me. I thought at first it was a polyp with a hole in it, or that a cyst had formed and opened. I introduced a sound very gently, which went in certainly six or seven inches. She was in such a critical condition that she could not be managed at the clinic, and I sent her to the city hospital, where she miscarried in a short time, probably on account of this manipulation of mine. I think she would have aborted any way, and in all probability the case reported by Dr. Bullock will terminate that way, no matter what treatment he adopts.

In the management of his case, from the report he has given, I think he has taken the right view. The woman ought to be put to bed most assuredly, and with proper treatment there may be such a resolution of affairs, especially this induration about the vulvar opening, as to permit

of the labor without any great destruction, especially since the perineum is already torn; and it is more than likely that the child will be poorly developed and small, so that he would probably be relieved of the necessity of any interference if this course were adopted. In the event of any especially dangerous symptoms arising, or ulceration of the indurated vulva, labor could be brought on at any time.

If I had the management of the case, I would be disposed to put the patient to bed and do all that I possibly could to relieve the induration mentioned and to cause a recession of the prolapsed neck.

In the case I have referred to, I am sure the greater part of the prolapse was simply a prolongation or stretching of the neck of the uterus.

Dr. Wm. Bailey: There are several other interesting questions in connection with this case. One would be to my mind whether or not in the later months or stages of gestation there would not be less likelihood of prolapse than during the earlier period. We frequently see a uterus which is prolapsed, the os being almost external, yet when this uterus becomes pregnant, as the gestation progresses the uterus mounts up into the abdomen and the prolapsus is oftentimes relieved. I am inclined, in a conservative way, to agree with the sentiments expressed by Dr. Cecil, that it would be perfectly proper to put this woman in bed, and if you can replace the uterus so as to avoid any disturbance of circulation in the soft parts, I believe it would be proper to do so rather than resort to a premature delivery. Of necessity we must take into consideration the life of the child. There would be a disposition on the part of all of us to regard this less because of the past history of the mother, and yet it is impossible to say absolutely that this child would be born syphilitic. It would seem that this woman is less under specific poison now than previously, because this is the only child she has been able to retain for such a length of time. She may have so improved under the treatment of Dr. Windell that there will be a child eventually delivered which will be perfectly non-syphilitic. I have not much sympathy with the modern idea that I saw expressed recently, viz: that it were better that the lives of all children born unhealthy be terminated at the time of birth. While from some standpoints such a view might be entertained, yet I have no sympathy with the idea, and do not believe we are permitted under any circumstances to sacrifice a life that might possibly be saved. And I would be disposed to ask Dr. Bullock to pursue this conservative

course in the treatment of his case; to put the woman to bed, keep her bowels open, using such support in the vagina as he can without making undue pressure. If under this plan of treatment the condition grows worse, if pressure upon the soft parts is not relieved, then he can say to the woman that it may be necessary to sacrifice the child; but if the case can be managed without this, it would be wise to attempt to save both mother and child. I would predict less difficulty in the delivery than in an ordinary case, because there is no resistance from the soft parts on account of the lacerated perineum; it is simply an engagement in the pelvis and the power to expel the fetus through that part where the difficulty would occur. Or at the proper time he might be able to assist the labor so as not to prolong it a great while.

Dr. T. S. Bullock: I agree with Dr. Cecil that the portion of the uterus prolapsed consists largely of the neck. The woman suffers greatly from pressure upon the bladder, and also from the swollen, indurated vulva; she can not maintain the erect posture without the uterus coming down, and pressure of this upon the adjacent parts has been very distressing, and I thought this was the reason the chronic inflammation of the right labia persisted. For the last week or ten days she has spent most of her time in bed, and feels somewhat better; but whenever she sits up in bed, or when she gets up for any reason, there is prolapse of the bladder, the whole anterior wall of the vagina is out, and yet the fundus of the uterus can be felt up in the region of the umbilicus.

The reason that I contemplate the induction of premature labor is on account of the fear that the pressure and low vitality of the tissues may result in disastrous ulceration or destruction of the vulva. I have seen quite an extensive destruction of these parts under somewhat similar circumstances. I never saw pregnancy advanced to this stage in a similar case, and it is a great wonder to me that she has not miscarried before this time.

I merely reported the case to get the opinion of the members as to the propriety of inducing premature labor. I had already made up my mind to carry out this procedure.

The essay of the evening, "Some Phases of Puerperal Infection," was read by A. Morgan Cartledge, M. D. [See page 361.]

Discussion. Dr. J. G. Cecil: This is an exceedingly interesting subject that Dr. Cartledge has brought before us, and scarcely a more interesting specimen could have been exhibited. It is evident that the infection was induced by the criminal effort at abortion. The point of infection was probably at the fundus of the uterus, where we see this dark protrusion, rather than at the cervix; still it would be possible at both places.

I recall the report made by Dr. McMurtry before one of the Louisville medical societies not long ago, in which he brought up the same question as to the advisability of radical operation in the presence of puerperal sepsis. It is a question of great importance, and one that will tax to the utmost the judgment of every one who has to deal with such cases. Certain it is that there are different kinds of infection of the puerperal state, some of which I think are absolutely inoperable. There are conditions in connection with the puerperal state that are similar to perforation which takes place in the course of typhoid fever. Some of these cases, as we know, and we have all witnessed such instances in the course of typhoid fever, are so violent that they result in death of the patient in twelve, twenty-four, or thirty-six hours. In other cases, apparently, nature has made a strong effort and has succeeded sometimes partially, sometimes completely, in anticipating the rupture, just as we see in cases of appendicitis, and, instead of having the whole peritoneal cavity invaded, the infection is confined to the locality of the perforation, and an abscess develops which is amenable to treatment. I think in operations for perforation in typhoid fever cases, success will depend upon the kind of case. In those that are extensive, in which there is infection of the whole peritoneal cavity, I do not believe any operation will succeed in relieving them unless surgery is resorted to almost the instant perforation is recognized, and thorough drainage instituted, when there might be a possible chance. I believe the same thing obtains in puerperal sepsis. In some cases that have come under my observation I am sure no abscess could be located; there could be no apparent reason for taking out the uterus, and I believe if the uterus were removed in such cases no good would come from it. In other cases, in which we see the process coming on more slowly, with more positive evidence of abscess formation, whether we can locate the abscess or not, then I believe the ground which I took in discussing Dr. McMurtry's report is correct, viz: That it is better to do an hysterectomy, getting rid of the infected uterus entirely,

than it is to take the chance of further infection and death from extension of the septic process, the formation of abscesses, or pyemia. It is better to remove the entire focus, if it is possible, giving the woman the chance of recovery by operation. In a case like Dr. Cartledge has reported, I think his procedure was the eminently correct one; in fact, he could have done nothing else that would have promised relief. I hope the patient will get well. She certainly would not have had a possible chance to do so without the operation.

Dr. T. S. Bullock: I congratulate Dr. Cartledge upon the outcome of his case so far, and upon his ability in discovering this softened condition of the fundus of the uterus with the curette. My conception of the use of the curette in cases of puerperal sepsis is that it is only applicable when the source of the infection is within the uterine cavity.

If the infection has spread, contaminating the utricular glands, the walls of the uterus, getting into the lymphatics, and spreading out through the ligaments to the peritoneal cavity, of course any procedure directed toward cleansing the interior of the uterus could be of no avail; but where the source of the infection is from a blood-clot, retained membranes, or an infected endometrium, then the curette is extremely useful, and I am confident I have saved many lives by resorting to it under these circumstances, then washing out the uterus carefully and tamponing well with gauze. In cases of the nature reported the only thing to do is to resort to hysterectomy. The only difficulty under these circumstances is to make the diagnosis. My opinion is that a condition such as this can only occur by the introduction of septic material from without; in other words, at the time of the attempted abortion through trauma, the introduction of infective material perhaps with the instrument that was used. Another point that I have noticed is that when the infection spreads by way of the fallopian tubes, as it undoubtedly does sometimes, or when the endometrium furnishes the nidus for infection, that these are essentially chronic cases; these are the ones in which abscesses are formed which are either evacuated by the surgeon or break through the rectum, bladder, or vagina. I have also had one case, which was reported to this Society, where exit took place through the obturator foramen; an enormous slough formed in the gluteal region. The patient recovered, but had a very tedious convalescence. In this case I believe it was an extension of infection from the cavity of the uterus through the tubes.

Dr. Wm. Bailey: Without presuming too much, I desire to say a few things which have occurred to my mind in regard to the question under discussion. I believe curettage is better applicable after abortions that have been produced by natural processes than after abortions that have been criminally produced. In the case presented to-night we have trauma both at the neck and at the fundus, and such trauma has made it, in my judgment, impossible for the woman to recover. I think Dr. Cartledge, with his educated touch, was very fortunate in deciding to remove the uterus by what he felt with the instrument. It is difficult sometimes to do this, even if you can reach it with the hand, and to detect changes in the parts by means of a steel instrument is much more difficult. I do not believe it would have been possible for nature to have walled off this local condition in such way as to allow the patient to recover, and I also believe that curettage is applicable, as already indicated, where there is either a clot of blood, retained placenta or membranes, or changes in the mucosa, where there are proper food conditions for the development of micro-organisms; that if we can remove this condition favorable to their life and growth, then we will do the woman good; but, beyond this, if there has been trauma, if the body of the uterus be involved, or if the infection shall have extended beyond this, then I believe that the use of the curette is not only a failure, but that great danger may come from it for the reasons already indicated—that you open new channels, fresh raw surfaces, which allows further infection to take place; that it is more certain and continuous than if you had left it alone. I believe the surgeon is coming now to a time, and will come to it more fully, when he will hesitate to open a carbuncle as he has been doing heretofore. When nature has succeeded in walling off such a condition, I believe it is better to trust to its absorption by natural processes than to lay it open and take the chances of further infection. I think the time will come when these conditions will not be treated by the knife to the extent they have been heretofore.

Dr. Cartledge was extremely fortunate in determining the condition present in his case and in the operation that was resorted to. These cases are something like cases of appendicitis—however much you may pride yourself in your diagnostic abilities, you do not know what the condition of the appendix is until you have opened the cavity and examined it; consequently he was extremely fortunate in detecting a

condition which made hysterectomy absolutely a necessity in order to save life.

Dr. A. M. Vance: It has never been my fortune to get to a patient that I thought was probably in the condition described by Dr. Cartledge until she was moribund. I can recall several cases in my experience, however, where I have found the patient dying, and have elicited the history of the use of knitting needles, hairpins, etc., on their part and on the part of abortionists, but the condition was such when I saw the patient that operation seemed absolutely useless. After Dr. Cartledge's report to-night I shall not feel like letting another patient die in such a condition without operating, although her case may seem hopeless. It is a fact that we are saving people now that even three or four years ago we thought were bound to die after abortions and other abdominal conditions. I have had a good many cases of collections of pus within the abdomen due to sepsis from abortions, the most of them being where large abscesses had formed, which I evacuated through the vagina with almost universal success. There is the greatest difference in these cases. Frequently a collection of pus will be found in the cavity, nature seeming to have made no attempt to confine it; in the next case you may find that nature has walled it off completely, there being simply an enormous abscess which is easily evacuated.

I have recently had two cases of this kind which recovered, and I can not understand why they got well. I was called as a *dernier ressort*, the surgeon usually being the last man thought of in such cases. One was a young married woman, the mother of one child, who had an abortion two weeks prior to my seeing her. I do not know whether the abortion was induced or not. She was almost moribund. Her abdomen looked as if she were going to have another full term child. Temperature 105° F., pulse 150, with symptoms of approaching dissolution. This woman had a family history of tuberculosis, and the doctor in the case thought she was tuberculous. I opened the abdomen as a *dernier ressort*, coming down upon a tumor that looked like an enormous pregnant uterus without any peritoneum over it. I could not make out what it was for a few minutes. Finally it proved to be the wall of a great abscess, its outside covering being the great omentum. When I finally got down into the cavity I evacuated at least a gallon of the most offensive pus that I have ever seen. This great cavity was simply walled off by the intestines. The pelvic viscera could not be made out because of the abscess wall, except the

fimbriated extremity of one of the fallopian tubes. The cavity was cleansed as thoroughly as possible and drained, with the expectation that the woman would die promptly, but she finally recovered.

Another case that puzzled me still more was operated upon more recently. I was called to Indiana to see a woman that they said was dying. I found a young married woman, the mother of four children, who gave the history that she had menstruated six weeks before, and two weeks before my visit she commenced menstruating, and the flow had continued ever since. I found her abdomen tremendously distended, temperature 102° F., pulse 144. I could not make out much from an abdominal examination on account of the great distension. She was in a cold, clammy sweat, lips blue, pulse very bad in character. I made a vaginal examination with two fingers of the left hand; it felt rather slimy, and when my fingers were withdrawn a section of membrane, which was fairly rotten and about as large as my two fingers, came away. I told the family I thought the patient would die in a few hours, but if they would have her taken to the infirmary at once I would see what could be done. She was operated upon at eleven o'clock that night. When the abdomen was opened the largest quantity of pus that I have ever seen liberated from one person's abdomen was liberated. It was absolutely inodorous. It extended from the bottom of the pelvis to the diaphragm; the intestines floated around in the pus like macaroni in soup. I thought the patient would die very promptly. She was put in the Trendelenburg position, and the abdominal and pelvic contents carefully examined; the uterus was found enlarged, the exterior having a glossy-like appearance; the ovaries seemed about normal in size; the fallopian tubes were deeply congested and red, the fimbriae doubled up. I removed tubes and ovaries, and irrigated the abdomen as thoroughly as possible with salt solution from the diaphragm to the pelvis, closing the external wound with the belly full of salt solution, draining with gauze and glass tube. That woman recovered, so I think we have cases and cases.

In Dr. Cartledge's case, judging from the specimen, no other procedure except that which was carried out would have given the patient any chance for recovery. It is very hard in these cases to decide just what to do, and Dr. Cartledge was fortunate in the selection of his operation in the case reported.

Dr. T. S. Bullock: I would like for Dr. Cartledge, in closing, to give the differential points in diagnosis in conditions of this kind,

where the infection is in the cavity of the uterus, and where it has extended beyond the uterine cavity, situated in the walls and in the peri-uterine structures. In my experience this is an extremely difficult matter.

Dr. A. M. Cartledge: As stated in the paper, this is absolutely an unique phase of the subject of puerperal sepsis, so far as my personal experience goes, and the case was reported in detail for that reason. It is impossible ordinarily to make a clear diagnosis or distinct differentiation between the conditions stated by Dr. Bullock. Let it be distinctly understood that in the case reported the systemic conditions were far more urgent than the local; the woman was in active sepsis, partially jaundiced, pulse rapid, temperature elevated, abdomen distended with evidences of general peritonitis, her cervix green, uterus soft and enlarged. If another patient should present with similar symptoms, I believe I would be justified in performing an hysterectomy.

As the uterus is opened before you, it will be observed that the left cornu presents a large gangrenous spot, probably caused by the instrument used in the criminal abortion.

Knife Blade in the Malar Bone. Dr. A. M. Vance: Three or four months ago Dr. T. H. Baker referred a boy to me who gave the history that in a boy's fight he had had a small blade of a knife broken off in his left malar bone. It had gone just inside of the orbital cavity. There was a small transverse scar. Introducing the tip of my little finger over the bony ridge, I could feel the foreign body, which was evidently pressing upward against the eyeball. I told the boy if he would come back the following day I would try and get it out.

I introduced four or five drops of a six-per-cent solution of cocaine, and made an incision just on a line with the old scar, and came at once down upon the foreign body. I could grasp it with forceps, but the instrument slipped off each time. The boy was positive in his statement that it was a piece of the small blade of a pocket knife, and described the knife from which the piece was supposed to have been broken, showing that not more than three eighths to one half inch had entered the malar bone. After working for quite a long time, I finally extracted a piece of knife blade about three-fourths inch in length and fully one-half inch in width that had gone down into the malar bone.

This boy had had no inconvenience from the presence of this foreign body, and the only way he could tell it was there was to feel it with his finger. The blade had entered just beneath the lower convexity of the eyeball. The incision healed quickly, and the boy had no further trouble from it.

The blade removed was rusty—looked like it had been buried in the ground—still there was never any reaction whatever and no swelling from its presence in the malar bone. It was about a year after the accident that the foreign body was removed.

THOMAS L. BUTLER, M. D., *Secretary.*

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Abstracts and Selections.

RESECTION OF THE CERVICAL SYMPATHETIC FOR GLAUCOMA.—Professor Thomas Jonnesco, of Bucharest, having made careful studies on the cervical sympathetic ganglion and its relations to the vasomotor and secretory mechanisms in the eyeball, came to the conclusion that the excision of the ganglion (on one or both sides, according to circumstances) would have a beneficial effect in glaucoma. In a case of this disease which came under his care in 1897 he therefore concluded to remove the superior cervical ganglion, and this was carried out for the first time on Sept. 13, 1897. Since then he has performed eight operations in all, a summary of the cases with results being now published. The results in two individual cases and the general results obtained in all of the cases were as follows: Case 1. A man aged 50 years suffered from absolute glaucoma. This was of the chronic irritative variety with intercurrent attacks. Bilateral resection of the cervical sympathetic ganglion was performed. After the operation there were marked contraction of the pupils (myosis) and diminution of intra-ocular tension even to the extent of hypotony. There were a cessation of pain and a distinct improvement in vision, the patient being able to see fingers at two meters distance and to go about and avoid obstacles in his path. He has been free from any further attack since the operation. Case 4. A woman, aged 49 years, suffered from chronic irritative glaucoma, and had been operated on by the performance of double iridectomy without benefit. She suffered from peri-orbital pain, and could scarcely read letters six centimeters high at the distance of one meter. The operation of bilateral resection of the cervical sympathetic ganglion was performed on Nov. 7, 1897. After the operation there appeared con-

traction of the pupils and coloboma of the iris. There were a perceptible diminution of intra-ocular tension and a disappearance of the pain. The eyesight improved sufficiently to admit of her reading ordinary type and letters. The improvement continued; nine months after the operation there were no pain and no exacerbation of symptoms. The general condition was good, and the patient was now able to read and write with ease. The general results may be summarized as follows: (a) lasting reduction of intra-ocular tension in all cases except No. 5; (b) myosis of moderate or marked degree; (c) disappearance of peri-orbital pain; (d) disappearance of attacks of irritative glaucoma; and (e) a considerable and lasting improvement of vision in all cases where there had been previously some existence of light perception and of visual acuity, showing that the optic papilla had not as yet undergone atrophy. It is explained that the excision of the superior cervical ganglion implies an excision of nerve-fibers supplying the muscles of the iris, the blood-vessels of the eye, and the entire uveal tract and the nerves supplying the peri-bulbar muscular fibers of the capsule of Tenon, while the secretion of the aqueous humor is diminished. At the same time the contraction of the iris diminishes the iridal angle and renders more patent the lymphatic orifices at the angle and makes the exit of fluid through them easier. The relaxation of the muscular fibers of Tenon's capsule also diminishes pressure on the ocular veins. It is pointed out that the technique of the operation is simple. The operator should incise the free anterior border of the sterno-mastoid, draw it aside, cut through its deep fascia so as to expose the carotid sheath, open the latter and separate the jugular vein from the carotid and vagus. The ganglion will be found in the space between; it should be excised above and below and detached. The operation is practically bloodless, and can be finished in about fifteen minutes.—*Lancet*.

TYPHOID FEVER IN THE MASSACHUSETTS GENERAL HOSPITAL DURING THE PAST FIFTY YEARS.—Dr. Reginald Fitz, of Boston, contributed this paper to the New York Medical Association, which was largely a historical sketch. The mortality rate, by decades, was as follows: For 1839-49, 11.1 per cent; 1849-59, 15 per cent; 1859-69, 15.9 per cent; 1869-79, 16.6 per cent; 1879-89, 14.7 per cent; 1889-99, 13.5 per cent. From 1839 to 1869 a liquid farinaceous diet was in vogue; from 1879 to 1889 it was chiefly liquid, beef-tea and the like; from 1889 to 1899 milk had been the chief diet. The mortality rates for these three periods were 14.1 per cent, 16.6 per cent, and 14.6 per cent respectively. Baths had been used since 1873, and since 1888 sponge and tub baths at a temperature of 65° F. had been frequently given. His conclusions were: (1) The treatment of typhoid fever does not now differ materially from the principles laid down in 1839; (2) the average mortality has not changed since the days of such active treatment as purgation and venesection; (3) intestinal hemorrhage, perforation, and relapse are quite as frequent now as they were at any time; (4)

a considerable variety of diet may be permitted without detriment and with possible benefit to the patient.—*Medical Record.*

EARLY DIAGNOSIS IN PULMONARY TUBERCULOSIS.—Dr. S. G. Bonney (*Medical News*, September 30th), in a paper read at the meeting of the American Climatological Association, would especially condemn: (1) Delay in instituting any physical examination whatever until long after the development of pronounced constitutional and pulmonary impairment. (2) Failure to examine upon the bare skin, the presence of clothing effectually preventing any approach to accurate results. (3) Neglect to examine the entire chest, the bases, interscapular spaces, and axillary regions being frequently overlooked. He would deplore particularly the existence of: (1) Erroneous conceptions concerning the significance of the absence of percussion dullness at the apices, an active process often being capable of recognition by auscultation considerably before the evidences of consolidation are apparent. (2) The non-recognition, in the absence of râles, of the various modifications in disease of the normal respiratory sounds. (3) Inaccurate interpretation of localized diminished intensity of auscultatory sounds, elevation of pitch, harshness of quality, and prolongation of expiration. He would severely criticize: (1) Failure to utilize cough preceding forced inspiration in eliciting the presence of slight moisture in the finer tubes. (2) The non-appreciation of the almost pathognomonic significance of a circumscribed bronchiolitis, even in the absence of dullness or other auscultatory signs.—*New York Medical Journal.*

THE BACILLUS ICTEROIDES THE CAUSE OF YELLOW FEVER.—The Commission appointed by authority of the President of the United States to investigate the cause of yellow fever has submitted its report. Its work was done in Havana, in a well-equipped laboratory, and twenty-two cases were the subject of study. The important conclusion of the Commission is that the bacillus icteroides of Sanarelli is the true cause of yellow fever, a conclusion quite contrary to that of Sternberg. The following are the conclusions of the report: (1) That the micro-organism discovered by Sanarelli and by him named the "bacillus icteroides" is the cause of yellow fever. (2) That yellow fever is naturally infectious to certain animals, the degree varying with the species; that in some rodents local infection is very quickly followed by blood infection; and that while in dogs and rabbits there is no evidence of this subsequent invasion of the blood, monkeys react to the infection the same as man. (3) That infection takes place by way of the respiratory tract, the primary colonization in this tract giving rise to the earlier manifestation of the disease. (4) That in many cases of the disease, probably the majority, the primary infection, or the colonization in the lungs, is followed by a "secondary infection" or a secondary colonization of this organism in the blood of the patient. This secondary infection may be complicated by the co-instantaneous passage of other

organisms into the blood, or this complication may arise during the last hours of life. (5) There is no evidence to support the theory advanced by Sanarelli that this disease is primarily a septicemia, inasmuch as cases do occur in which the bacillus icteroides can not be found in the blood or organs in which it might be deposited therefrom. (6) That there exists no causal relationship between the bacillus X of Sternberg and this highly infectious disease, and that the bacillus X is frequently found in the intestinal contents of normal animals and of man as well as in the urine and the bronchial secretion. (7) That, so far as the Commission is aware, the bacillus icteroides has never been found in any body other than one infected with yellow fever; and that whatever may be the cultural similarities between this and other micro-organisms, it is characterized by a specificity which is distinctive. (8) That the bacillus icteroides is very susceptible to the influences injurious to bacterial life; and that its ready control by the processes of disinfection, chemical and mechanical, is assured. (9) That the bacillus icteroides produces *in vitro*, as well as *in vita*, a toxine of the most marked potency; and that from our present knowledge there exists a reasonable possibility of the ultimate production of an "anti-serum" more potent than that of Sanarelli. The conclusions of the Commission are, unfortunately, of considerable import to New York, for a Reuters' telegram published in the Times says that 46 cases of yellow fever were reported at Key West on Tuesday last.—*Lancet*.

SOME INTERESTING CASES ILLUSTRATIVE OF TYPHOID.—Dr. Edward G. Janeway, of New York, at a recent meeting of the New York Medical Association, said that it had been his lot to see three cases of tetany associated with typhoid fever. At times the mental state was so rapidly altered as to lead to the suspicion of insanity. There was often a marked suicidal tendency, which should lead the physician to take special precautions to prevent harm to the patient. The occurrence of herpes labialis in typhoid was so extremely rare that if it appeared he felt disposed to revise the diagnosis most carefully. A thick crop of petechiæ was prone to develop on the abdomen after the prolonged use of the ice-coil. He had known both appendicitis and sapremia from retained menses to simulate typhoid.—*Medical Record*.

THE SIGNIFICANCE OF EPISTAXIS AS AN EARLY SYMPTOM OF SOFTENING OF THE BRAIN AND THE RELATION OF BOTH DISEASES TO ARTERIO-SCLEROSIS.—Karl Kompe (*Archiv für Laryngologie*, Band ix, Heft 2, 1899; *Laryngoscope*, September), after a history of five cases, gives his reasons for thinking that epistaxis may be a symptom of the earlier stages of arterio-sclerosis, and hence a forerunner of cerebral softening (encephalomalacia). It is established that sclerotic changes are very apt to be set up in the carotids, especially the internal, as early as anywhere in the arterial system. These changes most readily pass along into the ramifications of the carotids. The ethmoidal artery, a branch of the ophthalmic, being thus derived

from the internal carotid, supplies the upper and anterior nasal structures ; while the sphenopalatine, a branch of the internal maxillary, and therefore a derivative of the external carotid, supplies the posterior portion. These vessels, being among the first to become weakened, may easily give rise to severe and frequent epistaxis. The intima becoming first affected, the blood seems to lose its coagulability, and in addition to this the elasticity and retractile power of the arterial coats being lost, there is no good reason why a hemorrhage should not continue almost to exhaustion. As a matter of fact, plugging the nares is often necessary. All practitioners, and especially laryngologists and rhinologists, who are most frequently called to these cases, are urged to make a careful examination of the arterial system. This is of special importance, as treatment in the early stages does seem to accomplish some good, while later on it is of no avail.—*New York Medical Journal*.

OBSTRUCTIVE GROWTHS OF THE PYLORUS.—This was the title of a paper read before the Mississippi Valley Medical Association by Dr. J. E. Allaben, of Rockford, Ill. The author reported a successful and interesting case of pylorotomy, after which he drew the following deductions:

1. Cancer is one of the most potent factors in the causation of death, with a tendency to constantly increase in frequency of occurrence.
2. Gastric cancer occurs in about one fifth of all primary cases.
3. In gastric cancer the pyloric region is affected in sixty per cent of the cases.
4. The treatment of gastric cancer directed toward a permanent cure is, in the present state of our knowledge, limited wholly to surgical methods.
5. As early total extirpation of malignant growths with the hope of permanent cure is the goal toward which we are constantly striving, and as these growths in gastric cancer occur at the pyloric region in sixty per cent of the cases, it would seem to follow as a natural conclusion that pylorotomy would be the treatment most frequently prescribed for the cure of this malady.
6. Inasmuch as early diagnosis is the greatest requisite for directing proper radical treatment, the internist and the surgeon should turn their best efforts in this direction.
7. If the operation of pylorotomy were performed before obstructive symptoms manifest themselves, and before the occurrence of metastasis, the immediate results would be as favorable as in any other abdominal work, and the remote results as good as in extirpation of carcinoma of the breast.

Dr. J. L. Boogher, of St. Louis, Mo., then read a paper in which he dwelt principally upon the value of prostatic examination in the treatment of associated affections.—*Medical News*.

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"*NEC TENUI PENNÂ.*"

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NO MORE OSTEOPATHY IN KENTUCKY.

The osteopaths in this State have put up a stubborn fight for the right to practice here. They have spared no means to secure their ends. Harry Nelson, an osteopath, entered a suit against the State Board of Health of Kentucky, in which he sought to enjoin the board from proceeding against him to prevent him from practicing medicine in Kentucky. He claimed to be a graduate of a reputable school, the Osteopathic Institution at Kirksville, Missouri. The State Board of Health denied the statement that the Kirksville institution was a reputable school of medicine, and were sustained in it by an elaborate opinion given in the Law and Equity Court of Jefferson County by its judge, the Honorable Sterling B. Toney. The judge held that there were only two points in the case to be decided—the constitutionality of the act to protect citizens from empiricism, and whether the Missouri college was a reputable institution, a question of fact.

The matter of its being a reputable medical college was thoroughly investigated by a committee appointed by the Kentucky State Board of Health, composed of Dr. J. M. Bodine, Dr. George W. Griffiths, and Dr. H. A. Cottell, of this city, who visited Kirksville and made a thorough personal investigation, and in their report to the board stated that the school was not reputable.

The school has been investigated by other members of the profession, who fully concur with the report of the committee mentioned above

in its report. There can be no doubt that they have a good building and have spent much money in the hope of deceiving the public, but it will do them no good in this State. The law is plain, and the judge has so stated the fact in his decision.

Judge Toney declares in his decision that the action of the State Board of Health in all such cases as Nelson's is final and conclusive, and not a matter for a judge or jury to pass on.

The following is an abstract of Judge Toney's opinion :

As to the first question, Judge Toney held that the act was constitutional, quoting a number of State and Federal decisions in support of his position. As to the second, whether or not the Missouri institution was a reputable medical college, one of good standing, he ruled that this was a question of fact to be decided by the State Board of Health; that that board had instituted a careful investigation of this matter, appointing a special committee to do this, and that as a result of this investigation it had decided that the Missouri school was not a reputable medical college, although legally chartered under the laws of that State. The board's decision on this question of fact Judge Toney held was final and conclusive, and was not a matter for a judge or jury to pass on. The injunction was refused and petition dismissed.

THE AUTHORITY OF HEALTH OFFICERS.

In a recent issue of the *American Practitioner and News* we made a plea for greater liberality with public health officers, and the shameful and uncalled for condition of affairs in Union County, Kentucky, brings this important subject forcibly to the front. There has been an epidemic of smallpox raging in Union County for three months, and there are, according to the report of the Secretary of the State Board of Health, no less than six hundred cases of this loathsome disease in that county at this writing, when, as a matter of fact, if the local health officer had been permitted to exercise the duties of his office, there would have been no smallpox in the county.

There was a dispute among the physicians of the community as to whether the disease was smallpox or chickenpox. The county judge, whose plain duty it was to obey the orders of the local health officer, refused to erect a pest-house, it is presumed, because of the difference of opinion between the two medical factions as to the nature of the disease, and the failure on the part of the county judge to obey the local health officer resulted in the disease's becoming epidemic.

Suppose that the judge had erected a pest-house and the disease had proven not to be smallpox, who would have been the sufferer, the judge or the public health officer? The health officer, most assuredly, as it would most certainly have caused him to lose his position, for a man who can not distinguish between an epidemic of smallpox and chickenpox is certainly not worthy to hold such a responsible position.

A similar condition existed at Pineville, Kentucky, and in both instances the public health officer was handicapped by those in authority, whose plain and sworn duty it was to see that the instructions of the county board of health were carried out. It is to be hoped that the mistake made in these instances may serve as a warning to town and county officers, and that they may, at least from now on, understand that it is their plain duty to positively obey the instructions of public health officers, regardless of consequences. If trouble arises as to the result of any action that a county or town officer takes at the instigation of the county health board, the State Board of Health will be held amenable, as each county health officer is simply the agent of the State Board of Health.

Notes and Queries.

THE ITALIAN RED CROSS.—On the disastrous day of Adowa—"the Moscow of Italian colonial expansion—on the Kalends (why was it not the Ides?) of March, 1896, the combatant arm of General Baratieri's forces was put to shame by the medical, including that auxiliary to it, the ambulance service of the Red Cross. Not only under fire but throughout the hardly less sanguinary retreat the medico-military department, seconded by the "Croce Rossa" aforesaid, displayed a courage, a coolness, and an efficiency all too inconspicuous in the regiments of the line, and recalled to the world what Murat's 10,000 Italians endured and dared in the terrible Russian campaign of 1813. Italy, indeed, has good cause to be proud of her Red Cross organization, and ever since the "day of Adowa" has been lavish of her contributions to its support and development. The annual bulletin, the fifteenth of the series, issued by the Central Committee of that organization is now before us, and will be found full of interest (it may be of instruction) to the sister organizations of the other European powers. One of its special features is the account it gives of the "Red Cross Afloat," an innovation which Italy claims as her own for utilizing the waterway, consisting of lake, river, and canal, so characteristic of that historic battle-ground, the Lombardo-Venetian plain. The "ambulanza fluviale" (river ambulance) known as that of "Alfonso Litta of Milan," and fully described in the "bulletino," might suggest valuable additions to our own service, particu-

larly in tropical warfare or wherever there is waterway sufficient for such a "medical flotilla." The coolness, the silence it secures to the patient can not but prove grateful to him as well as conducive to his convalescence, to say nothing of the economy it effects in its exemption from draught cattle and their personnel. Reinforced, as indicated by the liberal contributions of the last three years, the funds of the Italian Red Cross in cash and material now amount to 6,262,187 lire, and its hospital accommodation includes forty-nine "ospedali di guerra," twenty-two mountain ambulances, fifteen hospital trains, two "ambulanze fluviali," two hospital ships, and forty stations in connection with railways. All these may be augmented in case of mobilization—the "stazioni fluviali," for instance, may be raised to eight. The professional staff numbers 786 medical men and pharmacists, 771 commissari (secretaries, clerks, and ministers of religion), and 2,032 "infermieri" (clinical attendants or porters with their chiefs). Represented abroad by forty-nine "delegazioni," the Italian Red Cross, under its Central Committee, has 359 "sottocomitati," ninety-eight ladies' "sezioni," and 559 communal delegates; while the members of the organization amount to 23,428, drawn from forty-nine provinces and 2,348 communes. The Central Committee, we may add, has obtained a new and honorable distinction for the members of the above-indicated committees, a regulation by which a reciprocal salutation is rendered obligatory between the officers and marines of the Royal Navy and the officers and professional staff of the Red Cross. Certainly the contrast between the combatant and the medical (including the Red Cross) arms on "the day of Adowa" more than entitles the latter to the respectful recognition of the former.—*Lancet*.

LOOMIS DISPENSARY FOR CONSUMPTIVE INCURABLES.—The Loomis Branch Hospital and Dispensary for Consumptive Incurables is said to be so badly in need of funds that it may have to be closed. While the Liberty Sanitarium (whose administration building was recently burned), which admits only incipient cases, charges from \$12 to \$25 per week for rooms, the work of the city branch for incurable cases is almost wholly charitable.

WHAT OUR STATE IS DOING FOR THE TRAINING OF HER UNFORTUNATE CHILDREN.—Many persons are not aware that the State of Kentucky does more for the training of its defective children, in proportion to their number, than it does for the other children through the public schools; in fact, it maintains three noble schools—one at Frankfort, for the teaching of feeble-minded children, known as the Kentucky Institution for the Feeble-minded; one at Danville, known as the Kentucky School for the Deaf; and one for blind children, known as the Kentucky Institution for the Education of the Blind.

These are all free, and the State, upon proper evidence, pays for the clothing and even for the railroad fare of those children whose parents are too poor to meet such expenses. In the case of the deaf children, and also

of the blind children, the school is in session from the middle of September to the middle of June, when the children all go home, in order that the family ties may not be destroyed.

The buildings for the care of these children are a credit to the State, and thoroughly equipped with all possible means for the comfort, happiness, and education of their pupils. They are under the charge of boards of trustees selected from the best citizens of the neighborhood, and the best possible teachers are employed for training their pupils. These three schools are maintained in the most generous manner by the State, and consequently rank among the foremost in the world for their efficiency.

It is strange to say, but true, that only a small part of the entire number of defective children, within the school ages of six and eighteen, get the benefit of what is freely offered by the State. This is particularly so with the blind children of the State. About one hundred and twenty-five yearly receive instruction at the Institution for the Blind in Louisville, though it is estimated there are more than five times that number growing up in ignorance in Kentucky. The school receives all children whose eyesight is so defective as to prevent their getting an education in schools for the seeing. There are also, in a separate building, equal and similar privileges provided for colored children.

We print this notice in order that any one who knows of a defective child of suitable condition to be taught, now growing up in ignorance, may get the benefit of what the State so freely offers. No greater work of benevolence can be done, and a postal card addressed to any of the institutions mentioned will secure full information as to the simple forms to be observed to secure admission.

PERMANGANATE OF POTASSIUM AS A DRESSING FOR BITES.—Dr. D. B. Das describes in the *Indian Lancet* the case of a woman, aged sixty years, who was said to have been bitten by a rabid dog. The wounds were very severe. "Almost all the soft structures of both the hands were wanting. Blood was flowing out in streams. . . . Hand, arm, body, face, and scalp all had got the same fate." The treatment consisted of washing with a lotion of thoroughly hot Condy's fluid, and subsequent dressing with equal parts of iodoform and potassium permanganate. The healing was prompt and satisfactory, notwithstanding the lacerated condition of the wounds. Dr. Das has previously used the same treatment in dog bite with excellent results. He asserts that there is less sloughing than is customary under this treatment.—*New York Medical Journal*.

QUACKS AND ABORTION: A CRITICAL AND ANALYTICAL INQUIRY.—It transpired at an inquest held at Eastbourne last week that the deceased died after a miscarriage, and that just before dying she stated that she had taken four pennyroyal pills. The jury returned a verdict to the effect that death was due to pneumonia, accelerated by an overdose of some medicine of a

corrosive character, self-administered and by misadventure. The druggist who supplied the pills said he was constantly selling steel and pennyroyal pills, which he had always understood to be harmless. They cost 1d. a box, which contained four pills, the dose being one pill three times a day. The pills were composed of Barbadoes aloes, sulphate of iron, powder of myrrh, soap, and oleum pulegii. A reference to the analytical portion of the report of The Lancet inquiry under the heading "Quacks and Abortion—A Critical and Analytical Inquiry," will show that in the majority of the pills examined, exactly these substances were found. It is interesting to note the druggist's statement that he understood that the pills were harmless, and the clause in the verdict that death was accelerated by an overdose of some medicine of a corrosive character; and the matter, in spite of these irreconcilable statements, was apparently allowed to drop.—*Lancet*.

MODERN SURGICAL TREATMENT OF HEMORRHOIDS.—Since a hemorrhoidal tumor is but the result of an inflammatory process, he believes that germ infection must be the main etiologic factor. A *locus minoris resistentiæ* is produced by certain mechanical influences, which, however, in the light of modern pathology, can be considered only as predisposing causes. In this class belong straining during defecation, obstruction of the portal vessels from liver disease and abdominal tumors, pressure produced by the gravid uterus, pressure on the veins from impacted feces, etc. That germs are primary factors in the production of hemorrhoids the author is satisfied from observations in his practice.

As to the treatment, he said that in the earlier years of his professional career he was in the habit of removing internal and external hemorrhoids with the ecraseur. His objection at present to this method is that the wire of the instrument is very apt to break, leaving the operator in a dilemma, especially when the operation is half completed. Secondly, the cut surface is not accurate, nor can it be regulated. No matter how close the wires are kept down to the base of the pile, the ecraseur cuts as it pleases and not as the surgeon desires it. Thirdly, it frequently happens that after the operation is finished complete separation of the tissues does not take place, and if the screw is tightened some tissue is drawn into the stem, and, if continued, the stem is apt to bore itself into the rectal wall. He does not favor the Whitehead operation. His method of operating for internal hemorrhoids differs but little from that of most surgeons. If he has to remove but one tumor of large size, he simply throws around its base a temporary ligature, cuts off the entire tumor, and then sews the wound with interrupted sutures in the direction of the axis of the rectum.—*Dr. G. M. Blech, in Medical News*.

CHAMBER DISINFECTION AFTER DEATH FROM PHTHISIS.—*Dr. Edward O. Otis* (Boston Medical and Surgical Journal, September 21st) says that the importance of disinfection or renovation after a case of phthisis is in his experience not generally appreciated. No tenement, apartment, or

room should be again occupied or let until satisfactory evidence of thorough disinfection or renovation has been furnished. A case narrated to him by a physician of Boston will illustrate the importance of this. The daughter of the landlady of a well-to-do boarding-house died of consumption. Some time afterward a young woman from the West took up her residence in the boarding-house and occupied the daughter's room. In the course of time she exhibited evidences of tuberculosis, and her physician, suspecting the source of infection, had her removed. Such experiences were probably familiar to many. According to the author's knowledge the disinfection of premises which have been occupied by consumptive patients and vacated, either by death or removal, before they can be occupied, is compulsory only in New York City, Italy, and Spain.—*New York Medical Journal*.

THE OCULAR CAUSES OF HEADACHE.—Dr. S. D. Risley (*Journal of the American Medical Association*, September 23d) thus concludes a paper read before the Section on Neurology of the American Medical Association at Columbus: The following conclusions may be regarded as established by clinical experience: (1) Abnormalities of the ocular apparatus are in a large group of patients the sole and sufficient cause of headache. (2) These abnormalities of vision may be the unsuspected cause, and therefore the absence of symptoms obviously referable to the eyes does not exclude them as an etiologic factor in headache, insomnia, vertigo, petit chorea in children, and certain stomach derangements. (3) The recent or sudden development of symptoms, after attacks of severe illness, as typhoid fever, the exanthemata, etc., or in association with more or less acute exacerbations of some general dyscrasia, is not sufficient evidence against ocular participation in causing the symptoms. (4) The participation of the eyes as an etiologic factor in headache can be positively excluded only in the absence of ocular disease or after the most painstaking correction of any existing error of refraction or abnormality of binocular balance. (5) For the relief of reflex symptoms accurate corrections are essential, and these can be secured only by the more or less prolonged use of a strong cycloplegic. (6) Immediate relief by these corrections in a large group of patients is not to be expected, since the pain is frequently due to associated pathological conditions of the fundus oculi, which require time for cure.—*Ibid*.

INTESTINAL OBSTRUCTION FROM BILIARY CALCULI.—Dr. J. Wesley Bovée, of Washington, D. C., read a paper at the meeting of the Mississippi Valley Medical Association with this title. He stated that intestinal obstruction from biliary calculi is not very common. Brinton found in 500 cases of intestinal obstruction but twenty-four cases due to gall-stones, and Leichtenstern found but forty-one in 1,544 cases of bowel occlusion. In the Manchester Royal Infirmary but one case in 50,000 patients treated for all troubles was found. As it is a condition practically limited to late life,

its rarity is to be expected. The author then dwelt upon the varieties of obstruction, the location, causes, symptoms, and prognosis.

In considering the treatment, he stated that Hippocrates, and later others, recommended the injection of air into the bowel. Tobacco smoke and infusion and different gases have been thus employed. Purgatives are positively harmful. Morphin and belladonna are the two best drugs in this condition. Of course the use of electricity has not been omitted. With medical treatment nearly half the patients recover, but is that a sufficiently large proportion? In 1662 Barbette recommended laparotomy for acute intestinal obstruction, and as abdominal surgery is now practiced, its use in acute obstruction of the bowel from biliary calculi should give brilliant results. Medicinal treatment may be employed for a short time, and, failing, should be superseded by laparotomy, with a careful exploration of the abdominal and pelvic contents. The seat of obstruction being found, the condition of the patient and the degree of mobility of the stone in the bowel will guide the operator in the subsequent steps. The plan of Tait, of passing a strong needle obliquely through the bowel wall into the stone to break it up, may first be tried, the puncture wound being closed by a Lambert stitch. This failing, the stone should, if possible, be pushed higher in the bowel and a longitudinal enterotomy performed with extraction of the stone. Gangrenous bowel, perforation, or localized peritonitis, with or without pus, should be treated *secundum artem*. It is always well to look for a second obstruction, as this has caused death in some cases. The deaths following laparotomy for this condition are nearly always from shock or sepsis, a strong argument for early operation. It would not seem improbable that early laparotomy in these cases should have a mortality of less than 10 per cent.—*Medical News*.

F. E. HARRISON, M. D., Abbeville, S. C., says: I have used Celerina in appropriate cases, and can heartily recommend it to all who wish an elegant preparation, combined with undiminished therapeutic activity. It is peculiarly fitted to such cases as delirium tremens, headache from debauch or excessive mental or physical exertion.

RENDER UNTO CÆSAR THE THINGS WHICH ARE CÆSAR'S.—It gives me pleasure at all times to render unto Cæsar the things which are Cæsar's. Although I am opposed to giving certificates relative to proprietary medicines, in this case I overlook my objections, as I consider Sanmetto one of the greatest vitalizers of the reproductive organs now in use.

P. C. JONES, M. D.

Kansas City, Mo.

INDIGESTION.—As long as people will be unwise in matters of diet, just so long will physicians be called upon to treat all forms of indigestion. It therefore is well to consider a remedy which is suitably adapted to this condition. We desire to call attention to Ingluvin for treatment of all forms of dyspepsia. It is a bland preparation of the ventriculus callosus gallinaceous. It has a property of soothing the irritated gastric mucous membranes and re-establishing a normal secretion of the digestive fluids. It has time and again proven itself superior to pepsin. Its prescription is attended with more certain results than pepsin. Whenever pepsin is indicated, try Ingluvin. It will give you more satisfaction. Messrs. Wm. R. Warner & Co., Philadelphia, the manufacturers, will send you sample upon request.

THE AMERICAN PRACTITIONER AND NEWS.

"NEC TENUI PENNĀ."

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE DOCTOR'S PAY.*

BY JOHN G. CECIL, B. S., M. D.

Professor Practice of Medicine, Louisville Medical College, Louisville, Ky.

For fear this paper may chance to meet the eye of some good fellow, I wish to say right in the beginning that "there are many exceptions to the rule." By a good fellow I mean a person who wants the doctor often, who never grumbles at the size of his bill, but sends a check by return mail. May his like be greatly multiplied!

That which is to follow applies particularly to general practitioners of medicine, and not to surgeons and specialists. These latter have learned many things well worthy of emulation.

The necessity for a readjustment of the financial affairs of the doctor becomes more apparent year by year. The multiplication of doctors, the difficulties in making a competence, not to mention the desirability of putting aside something for old age; the growing tendency of people to postpone payment for services rendered, all suggest the importance of serious consideration of this subject. The effect that inattention to the monetary aspects of our profession which I shall endeavor to show has upon our standing among other professions is one of no mean importance.

In the race for ascendancy the commercial spirit of the age should prompt us to put aside old ways and customs, no matter how much honored by long-time observance, which are dragging us down day by

* Read before the Louisville Medico-Chirurgical Society, October 20, 1899. For discussion see p. 417.

day, and adapt ourselves to later-day methods, which will not only improve the material aspects of our business, but which elevate and ennoble our profession. This is a matter that will demand unanimity of action in the whole profession. It means a hard fight and a long fight. The tendency is for things to grow worse rather than better, and there is no more favorable time than the present to meet the issue at hand. I feel safe in the assertion that whatever evils exist are largely of the doctor's own making. It therefore behooves him to set about the correction of them. Nothing is more certain than that if we wait for some one else to correct them, we will wait in vain.

It is with no little diffidence that I undertake to suggest some of these evils which are generally conceded to exist, and the remedies for them. Should this effort succeed in starting the agitation of this matter, then its object will, in part, be attained.

It is customary for commencement orators to indulge in beautiful platitudes to the young graduate about the grandeur of the noble profession, the self-sacrificing life of the doctor, the admiration, love, and esteem of the laity, the gratitude and devotion of his clientele. Contrast this with the first five or ten years of the real professional life of the hopeful but misguided young doctor, recall the beggarly, niggardly remuneration for his services—fifty cents for a call with medicines furnished, five dollars on long time for obstetric cases—with a few complimentary post-partum visits thrown in for good count. It is quite true that these figures may represent the full value of the services of some doctors, but it is not true of all. The public does not always exercise a very fine discriminating judgment in the selection of a doctor, otherwise the hands of the members of this Society would be covered with callosities from the excessive use of the scissors in clipping coupons, even at the above-quoted figures.

Likewise the popular-address man delivers himself of a lot of tommy-rot and fol-de-rol to the beloved public about the nobility of the medical profession; how the doctor spends his life fighting disease, the dread enemy of mankind; how, with matchless skill, he snatches the wan and wasted sufferer from the very jaws of death; how, in sickness or in health, he is ever ready to answer the call of the sick; how he plods his weary way through rain or shine, heat or cold, night or day, to alleviate pain and suffering, and sorrow, and distress; how he gives up home and family and friends, and throws himself with reckless abandon in the breach to check the invasion of some

dire epidemic, heedless of exposure to himself, little recking he of fame or fortune to follow. That same beloved public applauds the address, professes great admiration for the noble profession, says "'Doc' is a mighty fine fellow," but "he winks his other eye" and forthwith proceeds to stand "Doc" off for eighteen months; then with an awful tale of woe, and with cold, steelly glittering nerve, asks him to cut his bill half in two. In fact, as individual members of the profession we also applaud the noble sentiment of these addresses, but we commune with ourselves in thought on other and different lines.

From the above or the reference to the commercial spirit of the age, the inference must not be drawn that I am advocating in the practice of medicine a sole and overweening desire for the "loaves and fishes," but I wish in passing to intimate that sentiment will not keep the "Indian" from your door nor satisfy the clamors of the butcher, the baker, and the candlestick-maker.

There are other phases of this subject to which I ask your especial attention. What is the real standing of the doctor as a professional man; how does his profession rank with other professions; and upon what basis should he be remunerated for his service? I am constrained to believe that in the mind of the public our profession is not classed with the other professions; it is not accorded a place on the same high plane. Ours is sort of a brother-in-law to the other professions. Many will call it a profession, but think of it as really a trade. This is because some doctors make a trade of it. In part, at least, this misconception of the standing of the profession and the value of medical service has arisen through the doctor's own fault, from the unprofessional value he has placed on his service, and from the unprofessional method he has adopted of fixing the value of that service. Is it not a fact that most people estimate the value of medical service by the number of visits made, the length of time engaged, the number of miles traveled, or the amount of medicine prescribed, paying little or no heed to skill? And is it not a fact that doctors have accepted this way of estimating the value of their services; and is not the absurdity of it glaringly apparent? Upon skill, and skill alone, should rest the way to make a charge for professional service. A large part of the public look upon doctors as skilled mechanics; the only difference they see is in the doctor's dress and ordinary mode of locomotion. They think because he rides in a buggy, therefore he ought to charge less for his work. Until we can get away from the \$2.00 or \$3.00 per visit

plan, I very much fear our profession will always be ranked on a low plane.

To change the present prevailing method of charging does not necessarily mean to increase it. It is the method that I insist is wrong. For a service requiring little skill, then a small fee; but for a service requiring great skill, then by all means a fee that is commensurate. It is ridiculous to estimate the value of a doctor's service in the management of a case of pneumonia or typhoid fever by the number of visits made, at so much per visit. Why, some people keep a count of the number of visits made, and in making out the bill a little mistake of adding on a few dollars to round it out to an even number is very promptly called down.

Many a man will cheerfully pay \$500 for an ovariectomy, or \$200 for an amputation, that will kick like a mule over a bill of \$150 for a case of pneumonia, because the doctor only made about sixty visits. I mean no disparagement to the surgeon; he earns every dollar he collects, but so does the doctor. I rather glory in the surgeon's nerve, and I believe he would stand by the doctor if he would cultivate the grace of charging well. The custom of charging fees by surgeons and specialists has elevated these branches of the profession, and among other reasons is our explanation of why so many young men are attracted to these fields. The doctor, in the meanwhile, has plodded along in the way his great-grandfather trod, oftentimes fearing even to present his long-over-due-\$2.00-a-visit bill lest he offend his patron.

Still another aspect to this subject is the direct loss to the doctor by bad debts, slow pay, etc. No class of men, professional, mechanic, merchant or farmer, loses so great a proportion of his earnings. The practically compulsory credit system has done us incalculable injury. A man that can't get credit for ten pounds of sugar or ten yards of calico thinks nothing of standing his doctor off for a ten-dollar consultation for which the doctor has probably only charged him one dollar. He would be grievously offended if asked for spot cash. People tell it as a joke that the doctor's bill is the last one settled. They even tell the doctor himself that if they have any thing left after paying the milliner, the florist, the jeweler, the confectioner, and all the other luxury dealers, that they will pay him off, with never a thought of the jar that it gives his nerves. Who is to blame?

Another idol that should be broken is the custom of rendering bills yearly or half yearly. This custom has made the doctor not only poor,

but a poor business man. To affirm that prompt presentation of bills compromises the dignity of the profession is silly and absurd. What is the custom of our step-brother, the lawyer? He compromises his dignity and your bank account by collecting your money, pocketing his fee—simply to save you the trouble of writing a check—and sometimes he hands you the little balance. Verily, every young man ought to have a business education before beginning the study of medicine.

Before closing I wish to propound a conundrum, and to suggest the answer to it. Why is it that people will pay a quack more than a regular doctor for the same service? Is it not because the quack magnifies the ill and never forgets to magnify his own skill? Do not for a moment accuse me of wishing to imitate the method of the quack or charlatan. I know that I am on rather thin ice along here, but if a patient magnifies his own ills, or magnifies our service in relieving him, where is the harm, though scant is the probability of allowing him to magnify the bill? Is it incumbent on the doctor to disabuse his patient's mind or to underrate his own service? Remember, I am not talking to recent graduates nor making a popular address. Is it not worth more to relieve one man of a colic than another, especially if number one thinks his colic the worst that human ever endured? Should we insist that one price must prevail for all? Is it very wrong to turn a penny, an honest penny? Who, in your experience, values your service more, the man who asks you a year after the bill is due to knock off fifty per cent, or the man who pays promptly full value for services rendered? Which do you retain as your friend? I truly believe the worst enemies that I have made in a professional way are patients to whom I have made nominal charges for valuable services. I am trying to break myself of that habit.

People usually take a doctor at his own price, and no man's standing is improved by charging two dollars for ten dollars' worth of skill. A doctor, either young or old, makes a great mistake and debases his profession in underbidding his competitors in order to get business. It will return to plague him long after he intends to abandon the custom. Did time permit, I would sum up and draw some conclusions, but lest I overtax your patience I will let you draw your own.

LOUISVILLE, KY.

**METHYLENE BLUE AS A LOCAL APPLICATION IN DISEASES OF
THE MUCOUS MEMBRANE: WITH REPORT
OF THREE CASES.**

BY CHARLES MOIR, A. B., M. D.

Assistant to the Chair of Physiology and Clinical Instructor in Diseases of the Eye, Ear, Nose, and Throat, Kentucky School of Medicine, Louisville, Ky.

CASE 1. Mamie D., age sixteen, presented herself at the college clinic August 7, 1899, with the following history: Menstruated at the age of twelve years; health not good. After she attained her fifteenth year she noticed that at each menstrual period her tonsils would become very much enlarged, and sometimes a profuse hemorrhage would take place (vicarious menstruation); following this condition the tonsils would usually suppurate for a week or ten days.

The day she presented herself at the clinic I found both tonsils covered with a thick muco-purulent, adhesive material of a greenish color, offensive odor. I cleaned the tonsils with peroxide hydrogen full strength, and by its effervescent action separated the adhesive exudate, leaving the tonsils clean. I then applied methylene blue, three grains to one ounce of aqua dist., freely over the entire surface of both tonsils, and gave her a solution of the methylene blue, and told her to apply it to the tonsils three times a day, and ordered a general tonic containing iron, and told her to report back the next morning.

I did not see her again for nine weeks, when she told me that she had no further trouble with her tonsils, but had made frequent applications of the blue solution, had gained three pounds, and menstruation was about normal.

CASE 2. Jas. W., age thirty-eight years; occupation, laborer. Presented himself at the college clinic August 25, 1899, with the following history: Has had recurring attacks of tonsillitis for several years, followed by attacks of muscular rheumatism; no history or evidence of syphilis; health usually good, excepting slight attacks of headache.

Examination showed both tonsils and pharynx covered with tenacious muco-purulent exudate, very foul odor, tongue furred and covered with yellowish-gray coat, uvula elongated, constant attempts to clear the throat, deglutition very painful, and bowels constipated.

Treatment. Used spray peroxide hydrogen full strength, which quickly separated off the muco-purulent coat, cleaned the tonsils and pharynx thoroughly, and applied with cotton mop the methylene blue

solution, same strength as Case 1. Gave $\frac{1}{2}$ grain of morphia sulph., $\frac{1}{16}$ grain of atropia sulph., and had him wait around the clinic for an hour. At the end of that time the pain had almost disappeared, and the hypersecretion of mucus very much decreased.

I gave him compound cathartic pills to open the bowels, also gave him internally two grains of methylene blue three times a day in capsules, not forgetting to tell him that it would color his urine. I gave him the methylene blue internally for its anti-rheumatic effect.

I kept up this treatment for about a week, keeping the bowels open with salines, and applying the solution of blue to the tonsils every morning.

At the end of one week all symptoms entirely disappeared. I then reduced the internal dose of methylene to two grains once a day, and told him to keep up this treatment for several weeks. I did not see him again until November 16, 1899, when he told me that he had no further trouble with his throat, and that all symptoms of rheumatism had entirely disappeared. I examined his throat on the date of his last visit and found the tonsils slightly hypertrophied but otherwise normal.

CASE 3. Howard C., age nineteen; occupation, houseboy. Presented himself at the college clinic September 5, 1899, complaining of nasal catarrh and frontal headache. Examination showed that the nasal passages were very much obstructed by the turbinated bodies, mucous membrane very pale and patulous and covered with dry crusts, very foul odor; hearing slightly impaired; patient very anemic, sense of smell almost gone; no specific history. Patient is a typical mouth-breather.

Treatment. I thoroughly cleansed both nasal passages with peroxide hydrogen, full strength, removed all crusts, and applied to the nasal surfaces four-per-cent solution of methylene blue; ordered general tonic containing arsenic and strychnia, and told the patient to report back the next morning. He did so, and I found that there was a slight formation of crusts. I again cleansed with peroxide hydrogen, applied the blue solution, and gave him the following powder:

R Pulv. borax, ... $\bar{3}$ i;
 Pulv. camphor, ... gr. iv;
 Pulv. cubebs, ... gr. iii.

M. ft. chat. i. Sig: Use as snuff three or four times a day.

I saw him again the next day, when the odor had almost entirely disappeared. I kept up the above treatment, and at the end of two

weeks the patient was discharged, apparently well. I saw him on the street two weeks ago, and he told me that he had had no further trouble.

I report the above cases, believing that the pus-destroying properties of methylene blue are equal, if not superior, to any drug we have. It is non-irritating in one to five-per-cent solutions, and need not be used stronger than that.

I know that there are objections to its use in some cases on account of its staining qualities, as, if not carefully applied, it will stain any part of the tissues with which it comes in contact; but to overcome this objection I always coat over the surfaces (that I do not want it to come in contact with) with oil or vaseline.

As an internal remedy I have gotten good results in rheumatism and malaria. Prof. M. F. Coomes, who has had a large experience with methylene blue, believes it to be one of the best of all pus-destroying agents.

LOUISVILLE.

See our Special Offer to new subscribers on one of the advertising pages.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, October 20, 1899, the President, William Cheatham, M. D.,
in the Chair.

A Device for Preventing Mouth-Breathing. Dr. Wm. Cheatham: The little device I show you was gotten up by Dr. Hooper, of this city, for the use of mouth-breathers. He has some very favorable reports from its use. It is made from rubber, and of such shape that it will fit in between the lips and gums and effectually prevent mouth-breathing. I have used the device in several instances with most excellent results. Of course, if any obstruction to nasal breathing exists, it must be removed; but the majority of children who have had nasal obstruction, when this obstruction is removed, still breathe through the mouth. This little device also acts well with adults; it will stop mouth-breathing, snoring, etc. It seems to be an excellent thing.

Uterine Polyp. Dr. Turner Anderson: This specimen is a small uterine polyp that I removed to-day. I made the diagnosis of intra-

* Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

cervical polyp a few days ago, and this morning, in the course of my rounds, I concluded I would remove it. I had little or no trouble in getting a snare on and removing it in this way. There followed quite an active hemorrhage. I merely mention the case to show that in operations of this kind it is a good plan to prepare for every thing. Ordinarily we would not expect any hemorrhage from such an operation. This polyp had going into it quite a good-sized blood-vessel, and I had to control the hemorrhage by applying a clamp. This is the first case where I have seen any hemorrhage following such an operation.

Discussion. Dr. A. M. Cartledge: It has been my custom for years to twist off pure mucous polypi; but where there is any considerable connective tissue in them, I make a V-shaped incision and remove them in this way. This is of importance in preventing a recurrence, and the danger of hemorrhage is less. I split the cervix where necessary, and take out a V-shaped piece. I operated upon a case eight months ago where a polyp had recurred three or four times, and at each of the previous operations there had been considerable hemorrhage. In making a V-shaped incision to remove a cervical polyp, I always get into the contractile tissue, which does not bleed as readily.

Dr. Turner Anderson: I recognize that cervical polypi are rare. Uterine polypi do not ordinarily grow from the cervix, and in my experience I have never seen a uterine polyp recur after being snared.

Meningeal Lipoma. Dr. Louis Frank: On Wednesday of this week I first saw the child from whom this specimen was removed. The history was about as follows: This child is one of two in the family, about six months old, of healthy parents. At the time of birth there was noticed at the sacro-lumbar juncture this tumor. It was described to me as being at that time a sac with a pedicle, only partially covered with skin, the entire tumor being not quite the size of the head of a newborn infant, not covered by integument, apparently translucent, glistening in appearance, fluctuating. The physician who delivered the woman advised removal of the tumor at once. The mother would not consent to the operation, and a little later moved from the place where the child was born to Frankfort, Ky., where I saw it.

I examined the child carefully and found this tumor, and could feel an opening in the spine at the point where the tumor arose. It arose

by a fleshy pedicle about one inch in diameter. That portion of the tumor which is not covered with skin, when I saw it presented a yellow opaque appearance, and the tumor had a very fetid odor. The child, however, showed no symptoms of any kind; the fontanelle was fairly well closed; there was no evidence of hydrocephalus; the child had never had any spasms or other symptoms expected with such a condition; there was nothing except the presence of the tumor, and notwithstanding its condition, septic, the child had a regular, even pulse. As already indicated, there was nothing but the presence of the tumor itself, which was a nasty, stinking mass, presenting the appearance I have described.

I thought, as did the other physicians who had seen the case, that it was a spina bifida; it sprang directly from the median line at the junction of the sacral and lumbar vertebræ. The consensus of opinion was that the child would die shortly, and I was asked to remove the tumor.

We sent the child to an infirmary in Frankfort, and the tumor was taken away by cutting in probably one inch from its base. In removing the tumor it was the intention to make two semi-circular flaps, and I found that I had gone within three quarters of an inch of the point of origin of the tumor itself. In removing it I did not go into the spinal canal, and after removal, upon opening the tumor, I found there was no cavity, or any thing which would lead one to believe that it was a spina bifida, cyst, or meningocele. I believe that the tumor is a lipoma, such as we sometimes find with bifid spines, and that this child probably had a true meningocele which did not extend the entire depth of the tumor. Whether this is true or not I do not know.

The external wound was closed, and the child apparently did well. I was prepared, had I opened the spinal canal, to closed it with sutures. The main body of the tumor had undergone gangrenous degeneration. As soon as an incision was made into the tumor, a lot of mud-colored fluid escaped.

What the future of the case will be I do not know. In a tumor of this kind the diagnosis would be very difficult, as in an examination nothing but a spina bifida would suggest itself.

Discussion. Dr. A. M. Vance: I had a case some time ago, a boy eleven years old, from the mountains, who had an old case of infantile paralysis, with several sores upon his body which had commenced to

slough. I curetted these thoroughly and sent the boy back to the mountains. He returned subsequently with the condition practically unimproved.

I concluded, upon investigating this case thoroughly, that the paralysis was probably due to a condition similar to that in the case reported by Dr. Frank, except that the tumor in my case was covered by skin. There was a tumor upon the boy's back that appeared to be an ordinary lipoma, as far as we could make out. I am sure it was a case like the one reported, a tumor made up principally of lipomatous tissue, with a meningocele in it; that the paralysis of the lower extremity was due to the presence of this meningocele interfering with the nerves on that side. I did not undertake to remove the tumor. I amputated the boy's foot because of the gangrene when he returned the second time, and the amputation wound healed primarily.

I have never removed a meningocele by radical operation, and think statistics show that it is not a very satisfactory operation.

Dr. Turner Anderson: I do not see how it would have been possible, judging from the appearance of this tumor, to have made an accurate diagnosis. It looks more like a spina bifida than any thing else. Dr. Frank deserves much credit for attacking it in an off-hand way, and was very lucky to find that it did not communicate with the chord. He was probably induced to operate on account of the general symptoms present, the development of the fontanelles having gone on satisfactorily, the absence of paralysis of the extremities, etc.

I have a case under observation at present, that I was called to see in consultation some time ago, which presents a condition somewhat similar, but in this case there is absence of development of the cranial sutures, and I am sure that it is a case of true spina bifida. I congratulate the doctor upon his success in the treatment of his case.

Dr. A. M. Cartledge: I take it that this tumor is practically the only one that causes any difficulty in making the diagnosis of spina bifida. There is a remarkable thing about lipoma that occurs in this connection in its simulation of spina bifida, also in its histological structure. I find that the researches of Senn and others show that this tumor, while coming under the head of fatty tumor, is characterized by a remarkable development of connective tissue; that the trabeculae are very numerous. It is a congenital arrangement, and hence is sometimes associated with spina bifida, and has a true meningocele presenting in the base of the tumor.

The best article that I have seen on the subject, I think, is in Dennis' Recent System of Surgery, and this very tumor is described; and it is about the only tumor that has any similarity to a meningocele or true spina bifida.

I had occasion some time ago, when Dr. Rodman presented a case before this Society, to look up the literature of the subject. This is the only tumor which occurs here in which there can be any difficulty in differentiating from a true spina bifida.

The point Dr. Anderson makes about the fontanelles and the question of paralysis from interference of the nerves by pressure tend to make the diagnosis. Such tumors frequently slough and become necrotic.

Dr. Louis Frank: I have searched hurriedly what little literature I have at my command on this subject, and it would seem from the result thus far that I have been very fortunate. Had I known then what I now know, I might not have operated upon this case. The clearest and best description that I have been able to find is given by Sutton in his work on tumors. Senn, Dennis, and others have copied largely from the original description given by Sutton, and their conclusions seem to be the same as those stated by Sutton. Sutton also reports a case like this occurring in a child eight months of age. Other cases have been reported where the base of the tumor was made up of lipomatous tissue, a sac extending into the tumor proper which contains nerves—the so-called meningo-myelocoele, but not a true meningocele.

Later—Further examination seems to show this tumor to be a true meningeal lipoma.

In looking up the subject of lipoma, the only description I found of a lipoma occurring in this connection was the lipoma associated with meningocele. These tumors are described clearly; they occur in the median line at the base of the spine, either about the lumbar vertebræ or the lumbo-sacral juncture; the description tallies almost perfectly with the case reported; they are all said to be complicated with spina bifida, with a distribution of nerves in the sac itself. I think this case was one of that variety. It is a true spina bifida, but associated with it there is a congenital lipoma, springing from what structures I can not say. I was perhaps lucky in not going any deeper with my dissection. I removed the entire tumor, cutting through it about one inch from its base.

The child presented no evidence of any defect, although he was carefully examined. There was no clubfoot, no paralysis, no cleft palate, no hernia—nothing that we would expect to find in such a case. Upon manipulation of the tumor there was no tendency toward convulsions or coma, as we often find in such cases. The only thing which would strike one as occurring with such a condition was a failure of the fontanelles to close firmly. They were still somewhat soft; much more so than we would expect to find in a child of this age.

A striking thing about the tumor is that the skin proper extends over only a portion of it. Why the tumor should have undergone sloughing or become gangrenous I do not know. The blood-supply was quite extensive. There was considerable hemorrhage during the operation; five or six small vessels spurted quite sharply. The tissue at the base of the tumor was fibrous, dense, hard; it could hardly be caught up with a hemostat in controlling the hemorrhage. It was necessary to pass a ligature down and transfix the two main vessels that supplied the tumor.

In operations upon these cases, statistics show recoveries in from fifteen to twenty-six per cent; and I believe one German authority reports forty per cent of recoveries in the cases he has operated upon. I do not believe there have been a great many cases of this kind operated upon.

Removal of a Foreign Body From the Eye. Dr. T. C. Evans: About the first of September a young man came to me with the history of an injury (accident) to the eye. On examination I found that a small piece of steel had passed entirely through the cornea and lodged in the iris. The way the accident occurred, he said, was that he was a foreman in a machine shop, and was standing by while a workman was attempting to remove a die from a casing; that he took a sledge hammer and hit this hardened steel die, and a small piece of the steel from the die struck him in the eye. It pained him for a few minutes only; he went to see a general practitioner in the neighborhood where the accident occurred, who told him there was a piece of steel in the eye; and advised him to consult an oculist at once, and he came to see me.

The particle of steel was a very sharp, needle-like piece, and had caused no loss of the aqueous. The wound had immediately closed after it passed through the cornea. I told him it would be necessary to do an operation in order to remove the piece of steel, and made an

engagement for the next day. I operated by making an incision through the anterior part of the cornea, then passed a magnet into the anterior chamber and removed the particle of steel in this way. The foreign body was about half an inch in length and probably 1-32 of an inch in diameter. The wound healed without trouble, the pupil remained circular, vision normal. It had not gone far enough to make a wound in the lens.

This is one of the most satisfactory cases that I have seen where a foreign body was removed from the eye with a magnet. Had I attempted to remove it with forceps, the operation would have been unsatisfactory, and there would probably have been considerable hemorrhage.

Case 2. Injury to the Eye from an Explosion of Nitrite of Amyl Tube. The next accident is rather an unusual one. An old lady, a druggist in the western part of the city, undertook to heat a tube of nitrite of amyl over a gas flame; the tube as a matter of course exploded; pieces of the fragments passed through the cornea into the lens, producing traumatic cataract. Whether a piece of the glass remained in the lens or not I am unable to say. One or two pieces of the glass went into the lips and remained there for ten days. It seems rather strange that a woman in the drug business did not know better than to heat a tube of nitrite of amyl, therefore I say the accident was rather unusual.

Case 3. Accident in Removing an Intubation Tube. The next case is also an accident, but of a different character. Two weeks ago I undertook to remove an intubation tube from the throat of a child eighteen months of age. It was the child of a doctor, and with the grandmother holding the child, and its father (the doctor) holding the gag, I was not very ably assisted. I had used the modified O'Dwyer tube, which has a smaller head on it than the old-fashioned O'Dwyer tube. In attempting removal of the tube I was afraid to push very tightly with the extractor, and because of this fact an insecure hold on the tube resulted, but I thought it was sufficient to withdraw it from the larynx. Just about the time I was extracting the tube the father became alarmed because he saw a little blood in the child's mouth, and insisted upon turning the child over; the tube was thus thrown from the retractor, and was swallowed. I did not feel any uneasiness about the case, except that I knew the mother, grandmother, father, and other relatives would be greatly worried for twenty-four to forty-eight hours.

Strange to say, the father consulted several of his surgical friends about the case, the majority of whom told him that nothing was necessary; that the child would come out all right. One surgeon, however, said he would do a gastrostomy and remove the tube before it left the stomach. This was not done, and the tube passed by the rectum in about forty-eight hours.

Discussion. Dr. Wm. Cheatham: Doctor Evans' case of foreign body in the eye reminds me of two cases that I have seen. The first was in the Manhattan Hospital. A piece of iron entered the eye of a man, who did not know it until he began to become blind. He came to the hospital with an incipient cataract, and we could see the foreign body in the lens. I have seen one other case like this. It is sometimes remarkable how much trauma may be inflicted upon the eye without the patient really knowing any thing about it at the time.

The tube presented by Doctor Evans has an enormous caliber, and it seems to me the extractor would have some trouble in engaging it for this reason. I have gone back to the old-fashioned O'Dwyer tubes without the bulbous extremity. There is less danger in their use, they are inserted more easily, and there is also less trauma than with the tubes having the bulbous extremity.

I have been very much interested, and I think Doctor Evans has also had some correspondence with the same individual, in the subject of intubation recently. A gentleman in Munich, Bavaria, has written me several times on the subject. He is getting up some statistics on intubations, and also the serum treatment of diphtheria. I will read a portion of one of his letters giving facts he has collected, which may be interesting in this connection. It will be observed where the death-rate in intubation for laryngeal diphtheria was about 60 per cent before the introduction of serum, it is now only 10 per cent.

Cyanosis. Report of a Case: Dr. F. C. Wilson: I saw an exceedingly interesting case recently in a child two and a half years old, sent to me from the country, who shortly after birth had manifested some evidences of a patent foramen ovale. The child had also a decided cleft palate, and it had been the subject of paroxysmal blueness ever since birth. It was slow in development, slow in teething; it did not have any teeth until it was fifteen months old, and then they came in the reverse order; it cut the back teeth first and the incisor teeth last.

It had finished teething when I saw it a few days ago, but it was the subject of intense paroxysms of cyanosis, which occurred almost daily. Whenever the child would become at all excited it would become blue; its entire fingers and finger-nails would become cyanosed; face livid; toes blue; the whole surface of the body more or less livid and blue, which remains sometimes for several hours; then when the child goes to sleep these symptoms pass off.

The question arises as to what condition there is which gives rise to this, whether there is still a patent foramen ovale, or what can give rise to this intense cyanosis, which comes on with considerable regularity and persistency. The child is developed normally so far as its head and upper extremities are concerned, but the lower extremities are only partially developed. The child has never walked, and the parents consulted me to know whether any thing could be done looking toward relief.

I was satisfied from my examination, taking the condition found in connection with the cleft palate, that there might have been some arrest of development in the formation of the heart itself; possibly a defective development of the valve which ought to close the foramen ovale, and with that idea I could give them little hope for relief except what nature might bring about in development and improvement of the nutrition of the child.

The child is fairly well nourished, and the lower extremities, the parents say, are becoming better developed as the baby attains greater age. So the only ray of hope I could suggest to them was that nature might bring about relief in development. Any thing like a surgical operation was out of the question, and the only advice I could give them was to seek to improve the child's nutrition in every possible way; to improve the development of the lower extremities by massage; improve the general condition of the child by the administration of tonics, nutritious foods, reconstitutives, etc.

This has been an exceedingly interesting case to me, and one which I shall follow closely to determine what the future results will be.

Discussion. Dr. H. A. Cottell: I would like to ask Dr. Wilson if there is any association between cleft palate and an open foramen ovale. Do statistics show that there is any relationship between the two conditions? My reason for asking this question is, that the last case of open foramen ovale I saw, and I have seen but three in my entire

practice, had also a cleft palate. Fortunately the children all died within a few hours after they were born. The last one I saw, I noticed when the child was born that it was blue. I did not like its appearance. I had turned it upon the right side, and gave orders for it to be kept in that position. I went on about my business, and in the course of perhaps two hours I was called to come back. When I reached the house they said the child was dead. They told me that it had shown some symptoms of strangling; that the physician whom they called in the emergency had made a great discovery; he had found that the child's throat was in a terrible condition. Looking into the throat I found there was entire absence of the hard palate. There was no harelip, but the hard palate was gone, and they asked me if I thought the child had strangled. I told them no; that it died from what we called an open foramen ovale.

The paper of the evening, "The Doctor's Pay," by John G. Cecil, B. S., M. D., was read by Dr. J. B. Marvin in the absence of the author. [See p. 401.]

Discussion. Dr. Wm. Bailey: I hardly know what to say in discussing this paper. Some of it strikes me with a great deal of force. I am in sympathy with the sentiment expressed. I have heard of one or two doctors in the city who, when a bill was rendered and some objection made to it, that it was more than two dollars per visit, the patient asking him if he did not charge by the visit, stated that he had rendered service which he thought was worth the amount charged in his bill, and that was his bill and he expected to collect it, making his charge commensurate, as he thought, with the medical service rendered, just as a surgeon for an operation, in proportion to the risk and to the skill required so he makes his charge; and the physician having a difficult medical case, and being able to furnish the skill necessary for relief, he thought he was entitled to a fee not made out per visit but by the character of the service rendered.

I am in sympathy with this sentiment. I have not been a good collector. I have had no collector for many years until recently Dr. Bullock recommended a gentleman to me who has been doing some work in this line. I usually sent out my bills at stated intervals, and people have been kind in giving me a large percentage of the bills that I have them sent by mail, and yet I acknowledge that I have not done myself justice in the question of collecting fees. I have a family, for in-

stance, living in their own property, possessing real estate in considerable amount which is not very renumerative, and they always make the plea that they are hard up for money. I have done a large practice in that family under these circumstances, and have not collected a dollar from them for five years, the bill now running up to about six hundred dollars. I acknowledge that in some way I have not been up to the point of collecting a fee from people under those circumstances. I lose a great many bills that a business man would collect. It is difficult, though, under the present practice of the profession, even to collect two dollars per visit. A man doing a large grocery business in this city, whose family physician had recently died, sent his child to me for medical advice, and at the proper time afterward I mailed him a bill for a few visits made and for office prescriptions, two dollars per visit and one dollar for each office call. He wrote me a special letter to ask if for prompt payment I would not make a deduction from the amount; that his lamented medical advisor had been in the habit of allowing him, when a bill was rendered, to take off at least the amount that would have to be paid a collector. Believing that the man was abundantly able to pay this moderate fee, I declined to make any such concessions, and he paid the full bill, but I have not seen him nor any of the family since.

I am fully satisfied that the profession owes it to itself and is responsible for this state of things; owes it to itself to get fees commensurate with the amount of work and the amount of skill exercised in the cure of diseases that come under our observation, as well as the surgeon is. I have only been embarrassed on the other side of this question recently but once: Sometime ago a surgeon asked me to see a case that he thought was appendicitis, with the view of determining whether an operation should be done or not. I saw the patient and advised an operation; in three hours the appendix was removed, and the patient made a good recovery. I believe, I sent that man a bill for ten dollars. I met him at dinner soon afterward, and he thought it so good a joke that he told it on me at the dinner, and remarked that I had only rendered him a bill for this amount, when he thought I was entitled to the same fee received by the surgeon who operated.

Dr. A. M. Cartledge: The paper is a timely one, because we are all struck with the fee question, and surgeons especially have been thinking seriously recently of the method of charging for services. If I understood the paper correctly, it is rather a plea for doing away entirely with the

scale of fees ; certainly it inclines strongly to that ; the principle advocated seems to be one of doing away with a fixed set of charges in the practice of medicine. If we look far enough ahead I think we will see that this is going to be attended by a great deal of difficulty. There has been fixed in the mind of the community the idea that for medical services there is a usual rate of fee ; in fact, this fee is fixed in most communities, and there is a prevailing price as accepted by law as being the correct price, and were the ideas that Dr. Cecil advocates to become general, I believe a great deal of trouble would result. Take, for instance, any practitioner who reads his paper ; he may have a difficult case of pneumonia in which by the timely application of the ice-pack or the use of some modern treatment he has achieved unusual success, and naturally thinks that he has exercised unusual skill, and when the time comes to render his bill, he says that he has made ten visits, that he has saved a life, and will charge for his services one hundred dollars ; this will be the result just as soon as the physician acts in the capacity of charging for the value of his services ; he is following that rule with the total disregard to any set scale of fees ; he is simply exercising his own judgment of the worth of his services. It all looks very well theoretically, but when it becomes a question in the court, the patient takes a different view of the matter and denies the justice of the bill, and the matter is then one which has to be determined in a court of law. When such a bill goes into court, to begin with, they will not pay the doctor one hundred dollars ; they will not pay him sixty dollars, at most in this community they will not pay him over thirty dollars. We would be defeated in that line of action, so I do not believe I can indorse the paper as being a practical solution of the fee question for the general practitioner. I rather think he will have to get at it in a different way. You may carry out this principle whenever you can do so, but I think you will have to raise your fees all along the line. Take, for instance, the fee for an obstetrical case in this city, what is the custom as recognized by law as being correct ? The custom in this city has been fixed for ordinary medical calls, two dollars, in exceptional cases three dollars, and if higher prices than these are charged, if the man denies your bill, you would have the humiliation in court of being defeated. On the principle advocated by Dr. Cecil, take the question of obstetrical fees as prices obtain in the city of Louisville. You can find twenty men who would say charge fifty dollars for delivering a woman, and a busy doctor ought to have this amount ; the twenty men say that they make

this charge; but if you were put on the stand to-morrow you would be forced to admit that the prevailing charge for this class of work in Louisville was twenty to twenty-five dollars. When you have admitted this, then of course your case is lost every time. The same thing is true in the case of visits. I do not see any hope to improve matters in Louisville except to make the accepted fee in the community, the prevailing fee, that all good doctors will charge, three dollars per visit. When you can get better fees, do so under all circumstances; but to simply make this principle to govern the general charging of all doctors in the community, I do not believe it will hold water. It is a shame to the profession that men who have a large income will deliver a woman for twenty dollars; who will sit up all night and make three visits afterward and charge only twenty-five dollars. This does not obtain in some cities. In New Orleans, La., among the better class, fifty dollars is charged, and one hundred dollars where forceps are used. If the doctor should sue in New Orleans for fifty dollars as his fee in an obstetrical case he would get it, as this is the accepted price.

You may be able to raise your prices upon a great deal of the work that is done, but I do not believe this principle carried out in a general way would be successful in the practice of medicine.

Dr. H. A. Cottell: Doctors have the reputation of being bad collectors, bad business men, and they are to blame for it, as the author of the paper has said. We ought to improve upon the practice of sending out bills once in six months, once a year, or allowing our accounts to run indefinitely. I believe bills should be rendered monthly. I believe every doctor ought to have a collector, and book every thing he does, whether it is charity work or otherwise. I keep a collector constantly; before I did that I was the prey of deadbeats. I find now that a large number of these people have quit me since they get an occasional visit from the collector. We ought to follow business methods.

As to the question of charging for skill and not so much per visit, I am inclined to agree with Doctor Cartledge with reference to this; but how can you determine the amount of skill? The surgeon can charge for skill in his work, as it is all aboveboard; every one can see what he does; it is brilliant, showy; he can charge for skill; there is where he has a great advantage over the physician. Suppose Doctor Cecil, Doctor Bullock or Doctor Wilson performs some brilliant obstetrical feat, who is there to see it? Suppose a physician has a case of eclampsia; he induces labor, empties the uterus, controls the spasms;

does what I consider a very skillful thing, who is there to prove his skill? He may have a consultant, but it is very doubtful if he could get more than the ordinary obstetrical fee. Of course if he is dealing with a family that has plenty of money, he may occasionally be able to double this fee. The trouble with the physician is that he has no way to determine his skill.

I have in mind a very striking case in this connection: I know a man of wealth, a man who stands at the head of a certain profession in this city, who is also very high in the social scale. He received a bill from his physician and thought it was too high; he had evidently counted the visits. He said: Doctor, I would like to have you itemize this bill. The doctor said he never itemized a bill. Well, the man said, I would like to know what you charge me such a bill for? The doctor replied that he charged for brains. The answer was that the man did not propose to pay for brains. The doctor became a little angry, and the man wrote him a check for the amount and immediately changed his physician. I was not the physician in either instance, but I know that a medical friend of mine has been treating the family and a lot of its collateral branches for eight or ten years, making hundreds of dollars that the first named physician ought to have had.

When it comes to the plan of elevating fees all along the line, that is a very commendable and excellent suggestion, but I do not know that we can do it. I do not see just how it can be done. There is too much competition in the profession; there are many younger men in the profession who are willing to work for smaller fees. Those of us who have been practicing medicine for a quarter of a century or more naturally believe we have more skill than the man who graduated last year. We think so, and I believe we are right; but the public can not see it that way. The public is prone to take up the young men, especially if they are encouraged by the promise of small fees.

Dr. J. B. Marvin: I had an experience the other day out of the line of the paper, in that a patient attempted to pay a bill twice, the first time such an accident has happened to me. A lady mailed me a check, stating that she had called me up over the telephone to ascertain the amount due, as I had never sent her a bill. The check was numbered in the regular way. That afternoon she called me over the telephone and asked a variety of questions, and later sent the servant down with another check for the same amount; one check was No. 9, the

other No. 10. This is the first time I have had a patient want to pay me twice as much as I charged.

I keep no books; I have been cheating myself a great deal. I have suffered much from collectors; I have not had a collector for a number of years who has not stolen a lot of money from me; I have been without one for the last three years, and some of my accounts have been running that length of time. I have, however, in the last three years been trying to raise the charge; I have been conceited enough to put myself on a plane with Dr. Bailey and one or two others of the fathers in the profession here, feeling that while I was a young man still I have been practicing for more than twenty-five years, occupying a prominent position in the medical schools, doing a large consulting business, that I should not charge low fees. Wherever I can I have been charging the maximum fee, and have tried to live up to that in a measure. Of course, like Dr. Bailey, I have some families in reduced circumstances where I have gotten little or nothing, but my average charge has been three dollars per visit. In the majority of instances I get it if I collect any thing. I have been pricked in conscience somewhat along this line. A man comes, for instance, from the country to see me, sent by some doctor or medical student, and I do not hesitate to charge him ten dollars for my examination. He pays it unless the doctor has written beforehand that he is a poor man, etc., and gets my bill down to five dollars; my fee in such a case is never less than five dollars, more frequently ten. Why can we not get the same fee out of a man in the city? He comes to me, if he is not my regular patient, and expects an office charge of one to two dollars; but suppose he is not my regular patient and comes to me for examination, why is not that a consultation, and why should I not charge that man ten dollars? These cases have embarrassed me somewhat, and ten dollars looks much bigger under some circumstances than others. These city cases are the ones in which I do not ask cash payment; I would rather that man would let me put it in my book and send him a bill for ten dollars.

I think Dr. Cartledge is about right; there must be a prevailing custom, and we must fall back on that in case of any legal complication; there must be a prevailing rate for making charges, and I do not see how we can estimate the skill. While I may think I possess skill, the patient may not. I have several wealthy families, but I always feel that they are like the old negro, they make a notch in a stick of wood for every visit, and keep tab on me in that way. One of the families

when I commenced their practice requested me to send a bill every month; I render them a bill every six months or a year, and they frequently ask me to wait six months longer before paying it.

There is great opportunity for improvement in our business methods. I know I am guilty and would like to see the fees raised, and believe there can be improvement made in this line. We are practically charging the same fee that was paid during the hard times following the late war. If I remember correctly, the fee used to be three dollars per visit, then after the hard times during the war it was reduced to two dollars. Times are better now, and why should not we go back to the three-dollar fee, especially those of us who practice among the better and wealthier class of people?

Dr. Bolling (visiting): A fellow-feeling makes a man wondrous kind. I see that you have trouble here as well as we have in the country. I am like some of the gentlemen who have spoken, I do not see how we can regulate the popular estimation of our skill.

I will give you my views in regard to the matter: We should have a maximum and a minimum scale of fees for our services, and then charge in proportion to the ability of the patient to pay; then we should be true to one another and not undermine or undercut in our prices.

I want to say to you that I have been in medical societies for thirty years. I have labored hard to try and bring about harmony on this question. I know of men in the medical profession worth forty thousand dollars who will cut their visits down to one dollar or fifty cents each; we can never command any respect from the profession so long as that is done. We must elevate the plane to which we must aspire, and not have it appear that dollars and cents constitute the sole reason that we are in the medical profession.

I practice in the country; I go over mountains, through valleys, little narrow paths where one of you city men could not find the way to begin with; I can not charge a man two dollars or three dollars per visit and then charge for mileage, because I would never get any thing. In fact, I have started out to collect from parties who have owed me for years; I have gone with the resolute determination of collecting my bill; but after reaching my destination and finding the destitution, the half-naked children, perhaps not enough food in the house for the next meal, etc., such a feeling would come over me that I would simply ask the patient some foolish question and depart without even mentioning

my bill. So you see it is impossible to charge the same prices among all classes of people.

I have lived in the city; have practiced for rich people and the daily laborer; and I have found that the rich people such as you have in the city, some of them, are more reluctant to pay their doctor's bill than the daily laborer. A well-to-do man came to me one day and said, Doctor, you gave me a prescription for a throat wash two or three years ago which relieved me at once, and I have lost it recently; can you not write me another one without any charge? In the country we have just as many practitioners behind the drug counter as you have here in the city; this cuts our fees down. As is well known, also, we have to travel miles and miles in the country, and ought to get good fees for such practice, but the evil of cutting fees exists there to as great an extent as in the city; if you charge a man two dollars per visit, when he comes to settle his bill he will make the statement that Doctor So-and-so only charged him one dollar and fifty cents or one dollar for that distance.

Gentlemen, you are discussing a question to-night that you will never see settled so long as there is impurity in the heart and mind of man, the medical profession not being an exception to the rule; so long as men will undermine, underbid, and stoop to acts which are unjust among one another.

There is one thing which we must do, viz: We must get the lay mind up to a higher plane, and make them think that the medical profession is greater than dollars and cents.

Here in the city, if you are called into a difficult case, you always have someone to call in consultation and indorse your opinions, and if you are called into court the same thing applies; in the country it is not so. I recently had a patient who desired to come to the city for consultation, so I gave her the names of four different physicians, a letter which might be presented to any or all of the four, and stated to her that the opinion of these gentlemen would be worth a great deal to her. I saw the husband afterward, and he said he was charged five dollars for each examination by the physicians whose names I had given. You get here ten times as much as we are able to charge in the country.

One of the speakers, in alluding to the fee, stated that he could conscientiously charge the country man a little more than he could the city man. Of course we will accept that as being correct. Perhaps

you ought to charge a little more; your advantages are greater, your skill is presumed to be superior, because you have more experience, your opportunities are much greater than ours; your opportunities of association with one another and co-operation are also much greater, and expense is greater. A man that attends to a rough country practise has to grind and study it out. We have to sit down and wait, study and watch the therapeutic effects of our remedies. Here you would change two or three different times, and, the proper remedy being found, you would see the effects of it more rapidly. In the country the patient states, "Doctor, I leave the matter entirely to you." We are alone, we often have no opportunity for consultation, and we alone have to bear the responsibility.

It would seem that city doctors have less responsibility than those in the country, owing to the great number often associated professionally together. The city doctor may have less conscience, because there are more of you among whom the responsibility is divided.

Dr. J. G. Cecil: I am glad to have gotten here in time for the "finish." I am also glad that the members took enough interest in the paper to discuss it so thoroughly.

There are one or two points which I desire to emphasize. We all recognize that there is a very disreputable and undesirable condition of things existing at present, so far as our finances are concerned; if this is true, then we must do something to remedy the difficulty; no one else is going to do it for us. I admit that what Dr. Cottell says is true, that it is going to be a hard thing, perhaps an impossibility, to accomplish what we desire; but if we do not try, no one else will. If we acknowledge ourselves that our services are worth more than we are able to get, if we allow ourselves to be imposed upon in every way, are we going to stand quietly by and do nothing toward a remedy? If we do not attempt to improve the situation, who will do it for us?

Another point touched upon by Dr. Cartledge is perhaps the only one in the paper worth considering, and was the main reason I wrote the paper, viz: the manner in which we have been estimating our skill. It is a hard thing to do. I did not offer any means of doing this, as I do not feel myself capable of doing so. I simply recognize the fact that we have a miserable, low-down, entirely indefensible way of estimating the skill of the medical profession, which is recognized as a skilled and learned profession. The method of estimating skill by the visit, or by the amount of work done, is not in vogue in any other profession of

which I have knowledge. A minister's salary is not paid because he does so much in the way of preaching, so much in the way of funeral services, so much in the way of pastoral visits, and so much per each one of the numerous other things he does, but he is paid so much in total. A lawyer estimates his bill according to the amount of services rendered. If he is dealing with a man's case involving ten thousand dollars, he charges accordingly; if he is writing a will for a man who has a large estate to dispose of, and it requires a great deal of work to make the will correctly, he charges a good round fee for it. He does not charge for the length of time it takes to write the will; he does not charge for any thing except his ability to write it correctly. If he is dealing with a small affair—one which requires little skill or thought—he charges accordingly. How does he arrive at the amount of his bill which is satisfactory to his client? He must have some process. Why can we not have the same?

If an architect is building you a house for ten thousand dollars, he will charge you accordingly. He does not charge you for the time it takes to make the plans and specifications, but charges for what he believes to be his skill in drawing up those plans and specifications, and for a ten-thousand-dollar house he charges you a certain specified fee. An engineer does not charge by the number of miles or the amount of daily labor that he performs in surveying a railroad; or if he is putting down a mine, he does not charge you for the length of time it will take him to find ore, but charges according to his ability to determine the best way to run the lead, or to open the mine, etc. As far as I know, all professional services are charged for upon a similar basis, except the medical profession, where it has been the custom, it seems, to estimate skill at so much per visit. Surgeons and specialists have proven that skill can be charged for in the medical profession. Dr. Cartledge, for instance, will operate upon a patient, doing an ovariectomy in a family abundantly able to pay; for this service he will charge five hundred dollars. He will perform a similar operation in another family less able to pay, and will charge accordingly. His skill in either case is just as great; the amount of labor he performs in one is the same as in the other. How, then, does he estimate his skill? It is partly based upon the ability of the patient to pay. If I take charge of a case of pneumonia in a man's family, and conduct it safely through, or even if the patient dies, if the man is abundantly able to pay, I should be entitled to a good fee. My skill in managing the case

is professional skill; it has required long study and considerable expense to prepare me to manage the case, as it has the surgeon to prepare himself for a certain operation, for which he estimates his skill to be worth five hundred dollars; yet I must charge for my case at so much per visit. The surgeon charges for his skill, regardless of the time or labor required in a given case.

I insist that the only way by which we can improve the condition of things is to charge upon the basis of skill—not so much per visit. My idea in preparing the paper was to suggest that we get away from the custom of charging so much per visit, but render our bills for services rendered, estimating our skill in the management of the case.

THOMAS L. BUTLER, M. D., *Secretary.*

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foreign Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Death of Dr. Southey; A Medical Man's Blunder; Sanitation for Clergymen; Fever in West Africa; A Test Case; Condensed Food in the Port of London; A Case of Carcinoma; a Fresh Hospital Ship.

Dr. Reginald Southey, for fifteen years physician to St. Bartholomew's Hospital and lecturer of Forensic Medicine and Hygiene there, has died at the age of sixty-four. In 1883 he was appointed a Commissioner in Lunacy, an office which he resigned last year. Dr. Southey was educated at Christ Church, Oxford, where he had a most distinguished career, being elected Radcliffe Traveling Fellow of the University in 1860. His professional education was completed at St. Bartholomew's Hospital, and the Berlin, Vienna, and New York medical schools.

Application has been made on behalf of the Treasury at the Glamorgan Assizes at Cardiff for the discharge of the recognizances of a woman who had been committed for trial for the wilful murder of her husband. Mr. Justice Bucknill commented on what he stigmatized as the terrible blunder of a doctor, who had certified before the local magistrates that death was the result of a broken neck, and that a contusion on the side of the head might have been caused by a billhook found on the premises. After the woman's committal the body was exhumed by order of the Home Office,

and a post-mortem examination held, when three doctors found that the deceased had died of syncope, produced by lung inflammation. The judge hoped that the medical man would compensate the woman for his terrible blunder, and that it would go far over the face of the country that he was under the deepest obligation to her.

At the Chapter House of St. Paul's Cathedral a series of lectures are being given to the clergy on sanitation and hygiene, it being considered that it is most important that clergymen should be able to instruct their poorer parishioners in matters of sanitation. Dr. Schofield, in his opening lecture, expressed a hope that the time was coming when such lectures would be totally unnecessary. Oxford has now placed hygiene on the list of subjects for their local examinations, and he believed that in time the subject would be considered a necessary one before any one entered holy orders. It could be proved that 200,000 people died annually before their time in Great Britain. Dr. Schofield dealt at length with the cause of disease, effects of environment, occupation in life, and of bad air and bad food.

Major R. Ross, of the Army Medical Department, who has returned from the West Coast of Africa with the Liverpool Medical Expedition on Tropical Diseases, reports that, although the expedition had been at work only six weeks, the results were very successful. The authorities of Sierra Leone have, on the advice of the expedition, decided to use every means to exterminate the mosquito spreading malarial fever as well as the immediate cause. Major Ross considers that other conditions were favorable to health in West Africa, there being a good water supply. He thought that the whites were not careful enough, and that the houses were badly constructed and compared unfavorably with the residences of whites in India, which were built on plans which gave the inhabitants every chance of life. It appears that only one member of the expedition had suffered from malaria, and he had slept one night without mosquito-curtains and was thus infected. One of the party is proceeding round the West Coast in order to instruct medical officers as to the best way of dealing with the mosquito. The expedition thinks that the future of the West Coast is assured as soon as the colonial authorities take steps to extirpate the virulent mosquito in the neighborhood of the principal towns. Of course it will be long before the inland stations can be made healthy.

Attention has been drawn to the ages of several members of the medical profession: Sir James Paget, eighty-five years of age; Sir Henry Acland, eighty-four; Sir E. Sieveking, eighty-three, and Sir Henry Thompson, seventy-nine.

The Society of Apothecaries has obtained the opinion of Sir E. Clarke as to whether a holder of their license may legally describe himself as a "physician" or "surgeon" or both. This eminent legal authority has advised them that the L. S. A. does confer this right, and that the Society of Apothecaries is justified in so advising its licentiates. In view of the

opinion, the Society has invited the co-operation of the General Medical Council in having the matter authoritatively set at rest.

In a cutter's window in the East End a souvenir of an old-time war is on view. It is a saw which was used by a surgeon of the British Army to amputate the limbs of wounded soldiers at Blenheim, Malplaquet, and Ramillies.

According to the medical officer of health of the Port of London, during the first six months of this year more unwholesome food has been seized than in any previous half year. It consisted of almost every description of the commoner foodstuffs. Several supposed cases of plague were investigated, but only one case actually arrived at Gravesend, and this was at once removed to Port Sanitary Authority's Hospital. The vessel was disinfected, the crew was daily medically inspected, and all the rats which could be caught in the ship were cremated.

Mr. George Hamilton recently removed a large cylindrical-celled carcinoma which completely filled the cecum. In the operation the cecum, vermiform appendix, along with three inches of the ascending colon, and three inches of the ileum were resected. The severed termination of the small intestine was treated by interrupted sutures, and the cut end of the small intestine was united by means of a Murphy's button to the ascending colon. The patient made an uninterrupted recovery, and during two months gained more than two stone in weight.

In the hospital ship provided by the Princess of Wales for the South African campaign there are two hundred cots. The wards go the entire width of the ship, and give one the impression of the light and spaciousness of a great hospital. There are two rows of cots in each ward wide enough for change of position; each is provided with a spring mattress and a liberal supply of linen. Each bed has a movable frame which can be raised to support the back, and a small table is attached for the use of the invalid, at whose lightest touch it turns on its hinges to lay across the bed for meals and for other purposes. The operating chamber is on the lower deck, amidships. A perfect installation for working the Röntgen rays apparatus is a gift of the Duke of Newcastle. In each of the wards are small cooking-stoves, worked electrically and available for boiling water. Three refrigerating chambers, with a capacity of 2,200 cubic feet, are for provisions. Only one small ward for four officers is set apart on the ship.

Dr. Henry Hicks, the eminent geologist and specialist in mental diseases, has died. He had been long on the Council of the Geological Society, and devoted himself to the geological investigation in North and South Wales and Scotland.

LONDON, November, 1899.

Reviews and Bibliography.

Saunders' Question-Compends No. 4—Essentials of Medical Chemistry, Organic and Inorganic. Containing also Questions of Medical Physics, Chemical Philosophy, Analytical Processes, Toxicology, etc. Prepared Especially for Students of Medicine. By LAWRENCE WOLFF, M. D., Demonstrator of Chemistry, Jefferson Medical College; Member of the German Chemical Society, etc. Fifth edition. Thoroughly revised by SMITH ELY JELIFFE, M. D., Ph. D., Professor of Pharmacognosy, College of Pharmacy, City of New York, etc. 222 pp. Price, \$1.00. Philadelphia: W. B. Saunders. 1899.

With four editions of this question-compend scattered among the medical colleges of the country, and over 175,000 copies of the series of like publications already sold, little work is left for the reviewer beyond announcing a new edition.

The author, in pleading for the advantages of such an aid to the quiz-master, calls attention to the well-known fact that students in medical schools find the pursuit of chemistry a very difficult thing among the exacting tasks that fall to their lot.

This work in scope, mode of presentation, letter-press, and binding presents just the make-up that must make any study inviting. D. T. S.

Saunders' Question-Compends No. 11—Essentials of Diseases of the Skin. Including Syphilodermata. Arranged in the Form of Questions and Answers. Prepared Especially for Students of Medicine. By HENRY STELWAGON, M. D., Ph. D., Clinical Professor of Dermatology in the Jefferson Medical College, etc. Fourth edition. Thoroughly revised: Illustrated. 276 pp. Price, \$1.00, net. Philadelphia: W. B. Saunders. 1899.

In this fourth edition of Dr. Stelwagon's *Essentials of Diseases of the Skin* the entire book has been subjected to a careful scrutiny and revision, and the text has undergone numerous small but important changes in order that the subject-matter might reflect present knowledge of cutaneous diseases. Several rare affections have also been briefly described. Among them are hydroa vacciniforme, blastomycetic dermatitis, erythema induratum, phlegmonosa diffusa, hydradenitis suppurativa, epidermolysis bullosa, and conglomerative pustular perifolliculitis. The work is richly illustrated and in the style characteristic of the Saunders publications.

D. T. S.

A Compend of the Practice of Medicine. By DANIEL E. HUGHES, M. D., Chief Resident Physician, Philadelphia Hospital; Physician-in-Chief, Insane Department, Philadelphia Hospital, etc. Sixth physicians' edition. Thoroughly revised and enlarged. Including a Section on Mental Diseases and a Very Complete Section on Skin Diseases. 625 pp. Price, \$2.25. Philadelphia: P. Blakiston's Son & Co. 1899.

In answer to a continued demand for the *Compend of Medicine*, the author has much enlarged and made it far more complete than former edi-

tions. While conceding the author's claim that the compend is the most complete of works of its class, it can hardly be conceded, as claimed in the title, that it contains a very complete section on skin diseases.

As a handy reference-book its great value is not to be denied. It has the smallest possible number of waste or irrelevant words, and in the description and treatment of various diseases the salient features have been caught with the happiest aptitude and facility on the part of the author.

Bound in flexible Russian leather, with full gilt edges rounded, there is hardly to be found a more attractive book among medical publications.

D. T. S.

A Text-Book of Materia Medica, Therapeutics, and Pharmacology. By GEORGE FRANK BUTLER, Ph. G., M. D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Medical Department of the University of Illinois, etc. Third edition, thoroughly revised. 874 pp. Price, cloth, \$4.00; leather, \$5.00. Philadelphia: W. B. Saunders. 1899.

It is not to be expected that a great deal that is original or new can have been collected within the recent past in regard to standard medications. The fact is, they have been generally neglected in the interest of the newer remedies which also crowd one another from the stage with dazzling rapidity. What remains to be done in that regard is to present in the form of improved plainness of statement the virtues the old remedies are supposed or known to possess. This Dr. Butler and his publisher have creditably accomplished. The work is especially excellent on the pharmacal side, and in treating of remedies by groups the author has much facilitated the understanding and remembering of important facts and principles.

The reader is favored with an introduction in which the author defends regular medicine against various interlopers, such as miraculous waters, Christian scientists, and the like fads. While the reviewer would fully agree with him as to the worthlessness of these fads except as means of impressing the mind, he can not forbear asking whether we of the regular profession ought not to cast out the beam from our own eyes, that we may see clearly to remove the mote from our brother's eye.

Let us make sure and give assurance that placebos do not constitute a large part of our prescriptions, and that possibly a majority of those that are not had better be so, that our visits are only so many as the interest and the peace of mind of our patient requires, that no hopeless and useless operations are performed, and no schemes of mere money getting are worked on our patients.

When we of the regular profession have learned the Confucian maxim of doing nothing unto others that we would not that they should do unto us, then with clean hands and a clear conscience may we wage war against the representatives of the various pathies who, in standing between patients and such medicines as are dealt out by many doctors, may be doing less harm than we sometimes think.

Dr. Butler is very conservative in regard to the various serums and antitoxins. To the diphtheritic antitoxin he gives the credit of lessening by about fifty per cent the number of deaths from diphtheria, while in nearly all other cases this character of treatment is regarded as *sub judice*.

On the whole the work is quite a creditable presentation of its subject, and, appealing as it does to Western pride, will doubtless continue to achieve a creditable patronage.

D. T. S.

The Nervous System and its Constituent Neurones. Designed for the Use of Practitioners of Medicine and of Students of Medicine and Psychology. By LEWELLYS F. BARKER, M. B., Former Associate Professor of Anatomy in the Johns Hopkins University and Assistant Resident Pathologist to the Johns Hopkins Hospital. With two colored plates and six hundred and seventy-six illustrations in the text. 1122 pp.

There has been so much that is new and marvelous contributed in recent years to medical studies in the line of bacteriology and organotherapy, that progress in the study of the nervous system has been in a measure obscured or lost sight of. And yet in no department has more radical modification of views taken place than in the minute anatomy of the nerves. We have before us the first effort to present a comprehensive plan of the development of the neurone concept.

This concept is essentially that every nerve cell is anatomically an independent structure and connects with its fellows, not by actual fusion but only by contact. The term neurone then applies to the histological unit of the nervous system, and includes the whole element-cell body, protoplasmic processes, axis-cylinder processes, and arborization and collaterals, and on this conception all neurologists are coming to an agreement.

Certain of the most eminent investigators, however, notably Apáthy and Held, are inclined to insist on a modification of this view and to contend that in a certain considerable class of cases anastomoses of dendrites and axones do normally take place. This, however, would only tend to enlarge the unit, and would not do away with the neurone concept. It would be impossible in the space allotted to us to do justice to the rich mine of new material here first opened in collected form for the profession. The marvelous ingenuity shown by the various investigators in the invention of coloring and various other tests, the infinite patience indicated, and the genius of interpretation, only the patient readers of the book can fully realize. With an exalted opinion of the medical profession, we yet can not agree with the author that he aptly describes this book as written for the practitioner of medicine. Certainly the busy practitioner must experience many interruptions before he can have mastered it.

The work of the author has not in large part consisted of original investigations or contributions of facts, but he has in a masterful way combined the facts discovered by others and traced out their logical significance.

For the student of psychology the book has a usefulness that no other work based on anatomy pretends to possess, and combines information to be gained only by a search through the great mass of the world's high class literature.

Indeed, for every progressive student, investigator, and thinker along these lines it deserves the highest encomiums that can be bestowed upon it.

D. T. S.

Abstracts and Selections.

THERAPEUTIC USES OF NITRO-GLYCERINE.—In a paper on the pharmacological action and therapeutic uses of the organic nitrates, published in the September number of the Medical Chronicle, Dr. C. R. Marshall, Professor of Materia Medica in the University of St. Andrews, devotes a page to nitro-glycerine. He considers that it is serviceable only in diseases connected with actual or relative spasm of unstriated muscular fiber. This group may be subdivided into two main divisions—circulatory and respiratory—other conditions of this class (colic of various kinds, etc.) being much better relieved in other ways. As regards respiratory diseases, spasm of the bronchial tubes (asthma) is sometimes benefited by the administration of nitro-glycerine, and relief in other kinds of dyspnea is said to occur. That some influence is exerted on the bronchial muscles there can be no doubt, but in most cases of asthma the results are disappointing. In pneumonia and other respiratory diseases there seems to be no rational basis for the use of nitro-glycerine. This drug is of the greatest value in conditions affecting the circulation, and, as far as experimental evidence goes, only in conditions accompanied by an increase in arterial pressure. When this occurs and gives rise to symptoms such as pain, these are often quickly relieved by nitro-glycerine or any other rapidly acting vaso-dilator. But cardiac pain is not always so caused, and in these cases vaso-dilators as a rule fail to relieve. In some individuals severe cerebral effects are produced by small doses of nitro-glycerine; others bear comparatively large doses—even as much as a drop of pure nitro-glycerine—with impunity. Under ordinary circumstances tolerance is quickly established. The most common ill-effects produced by nitro-glycerine and vaso-dilators generally are distressing palpitation and headache, the latter often of a severe kind and persisting long after the vascular effects have passed away. Other effects are dizziness, tinnitus, and dilated pupils, hematuria and choreic movements, and after large doses weakness in the legs, nausea, and vomiting. The solid organic nitrates—erythrol tetranitrate, mannitol, hexanitrate—are of value where gentle and prolonged dilatation of the blood-vessels is required. Erythrol tetranitrate is especially useful as a prophylactic in preventing the onset of anginal pain.—*Lancet*.

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"NEC TENUI PENNÂ."

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H. A. COTTELL, M. D., M. F. COOMES, A. M., M. D., Editors.

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This Journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The Editors are not responsible for the views of contributors.

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JOHN P. MORTON & COMPANY, Louisville, Ky.

ANNUAL REPORT OF THE HEALTH DEPARTMENT OF THE CITY OF LOUISVILLE.

This report is in neat pamphlet form, and demonstrates the great care and diligence of Dr. M. K. Allen, who has proved himself to be a most excellent health officer. He makes many valuable suggestions, chief among which is an improvement in Beargrass Creek, so as to drain or flush it. We called attention to the condition of this stream in a recent issue of the Practitioner and News, and again wish to emphasize the fact that this sluice of filth is a menace to those that live adjacent to it, and that the great city of Louisville should at least spend money enough on it to render it harmless if not unsightly.

Dr. Allen calls especial attention to the "social evil," and states that about one tenth of the population of the United States are in one way or another contaminated to some degree with syphilis. We have no doubt but the number of persons who are contaminated is as great as one in ten, and we grant that what the doctor says about establishing a bureau to supervise the houses of prostitution sounds very well, but in the past this plan has proved impracticable. It was tried in St. Louis and New Orleans years ago and was abandoned, and so it has been in a number of other places where it has been tried.

There is a city (Seville, we believe) in which the "social evil" is under complete control. The "red light" district is isolated, and no female who lives in that quarter is permitted to leave it except when she goes out to a country seat for vacation, and this she is compelled to do whether she wishes to or not, but is still under the care of a superintendent, who sees that she does not ply her trade while at the rest home. Further, the person who runs the house of prostitution is made responsible for the doctor's bills resulting for attention given to parties who become contaminated in her house. It is needless to ask if such measures could be carried out in any American city.

This question of prostitution has been considered by many of the wisest men of all ages, and as yet there has been no means devised to even modify the manner of conducting it, and after all it is in about as good shape as it can be.

THE SOUTHERN MEDICAL COLLEGE ASSOCIATION.

While it is unfortunate for the medical profession of the South that the medical colleges in their Association require attendance upon but three courses of lectures for all students who matriculated and attended a course of lectures before January, 1899, and while it is a serious mistake for the Association to allow a college to admit a student to advanced standing within three months after the completion of a course of lectures, the medical profession would accept in good faith the professed determination of the Southern schools in the interest of higher medical education were it not that some of these schools appear to disregard some of the fundamental principles that are observed by reputable colleges. This statement is true, if we are to believe the statements in many letters written by students in attendance upon lectures in these schools, and the records of such students during their attendance upon lectures in another school.

It is recognized by every medical college that no student can by any means be credited with attendance upon a course of lectures, or for work done in any year of the graded course, except by official credentials stating such facts, and signed by the officers of the college in which he claims to have attended lectures. The mere statement of the student that he has attended a course of lectures in a medical college, with the presentation of a matriculation ticket, laboratory tickets, or receipts for money paid, does not indicate in any degree that he is entitled to credit for any part of a course of lectures.

A medical college may be justified in examining a student for advanced standing who has official evidence that he has attended a regular course of lectures in another college, though he may not have passed an examination for advanced standing; or a medical college may admit a student to advanced standing without examination who presents credentials of having passed an examination upon the branches of the preceding year in another school. But no school can advance a student or give him credit for attendance upon lectures under any other conditions.

For the last two years—and we presume during previous years—several of the Southern schools have admitted students to advanced standing, allowing them one or more years' credit, who presented no evidence of attendance upon lectures except matriculation and laboratory tickets, which were issued to admit the students to the school and to the laboratories only, and did not indicate that they had completed the work in any department, or attended lectures at all. This practice was not discontinued after official notice that such students were not entitled to credit for attendance upon lectures. This is a practice that should not be tolerated by the medical profession, and any school that will persist in such irregularities should not be recognized as complying in any sense with the requirements of State Boards of Health or State Examining Boards, and their graduates should be refused recognition.

This is a timely warning, especially in the interest of these colleges, for if they do not take warning very soon it may be too late.

Notes and Queries.

LOOMIS SANITARIUM FIRE.—Although the administration building of the Loomis Sanitarium was totally destroyed by fire on October 14th, the work of the institution has gone on uninterruptedly, the Casino Building having been temporarily adapted to the purpose of administration. It is expected that a new administration building will be completed within a few months. None of the patients' cottages were at all injured by the fire.—*Medical News.*

A REMARKABLE YARN ABOUT A JEALOUS DOCTOR.—On Thursday of last week the Mail and Express published an account of the case of a blind man, related by himself, who declared that some years before a certain physician who was at the time a friend of his had treated him for some eye

trouble, but without success, whereupon another physician was called in. The second doctor was successful for a time, but eventually he, too, failed in the case, which went on to complete blindness. The first doctor, it is gravely asserted, confessed on his deathbed that out of jealousy he had surreptitiously drugged the ailing man in such a manner as to produce blindness! What a pity that he did not reveal the name of the drug.—*New York Medical Journal*,

CAN WHITE MEN LIVE IN THE TROPICS?—A writer in the *British Medical Journal* is much distressed because Benjamin Kidd, the author of "Social Evolution," has recently published a series of articles attempting to show that it is impossible for white men to become acclimatized in the tropics. So sure is Kidd of his position in the matter that he predicts that "in the end there can hardly be room for any important difference of opinion." He also speaks of the "innate unnaturalness of every attempt to reverse by any effort within human range the long, slow process of evolution which has produced such a profound dividing line between the inhabitants of the tropics and those of the temperate regions." This is decidedly dogmatic, and, moreover, his pessimistic opinions are quite at variance with evidence brought before the Royal Geographical Society last April by Dr. Sambon to show that the causes of disease, deterioration, and deaths in the tropics are due to pathogenic germs, which have their limited and peculiar geographical areas, and differ greatly in the various tropical regions. If heat were the difficulty in the way, of course acclimatization would be altogether hopeless. "There appear to be good reasons, however, to believe that the real enemy is the microbe; and, if so, we may hope to fight against it in the tropics as successfully as has already been done in the temperate zones by sanitation and the gradual acquisition of immunity. This doctrine is strongly supported by some of the highest authorities in tropical pathology."

Dr. Manson, who has written a book upon this subject, and Dr. Rho, director of the Medical Department of the Italian Navy, are also thorough believers in the possibility of tropical acclimatization. "The death-rate of European troops in the tropics, which used to be from 100 to 129 per 1,000, is now as low as 12 per 1,000 in India. In Trinidad and Barbadoes the sickness and mortality among European soldiers are actually less than at home. The Boers are the finest men in South Africa. The Portuguese under unfavorable social conditions have been totally absorbed in India, but in Guiana and Brazil they have thriven remarkably well. Spaniards and Italians have become completely acclimatized in the tropical parts of both North and South America. The death-rate of Spaniards at Cuba is less than in Spain, and their birth-rate is greater." Unfortunately, the question has heretofore been discussed mostly by geographers, statesmen, and journalists. Now that the attention of medical men is turned to it, there is every reason to believe that the conditions for successful life in hot climates will become more thoroughly understood. It is to the microbe of the tropics rather than

to the heat that attention should be directed. The different experiences of the men in ships and the men on land at Santiago proved this beyond question. We have annexed leprosy in Hawaii and yellow fever in Cuba. If we expect to do justice by the tropical islands which have so suddenly come into our possession, we must learn to live on them. This is the immediate problem of the medical department of the Government.—*Medical News.*

AN IMPORTANT LEGAL DECISION IN MEDICAL CONSULTATIONS.—The Boston Medical and Surgical Journal for October 26th says that a case of considerable interest to medical men has recently been ordered to be retried by the appellate term of the supreme court. A bill of two homeopathic physicians, of seventy dollars for the attendant, and a hundred and seventy-five dollars for the consultant (who made six visits), in a case of fractured elbow, was disputed by the patient, who was left with a stiff joint and interposed with a counterclaim for five hundred dollars damages for malpractice. In the sixth municipal court the full amount of the bill was awarded to the physicians. In giving his opinion in favor of the reversal, Justice McLean, of supreme court, concluded as follows: "There was no justification by custom or otherwise in plaintiff's employment of Dr. Roberts (the consultant) without a frank and full statement of the situation to the patient and the defendant (the patient's husband), and learning their wishes concerning the professional persons to be brought in. There can not be properly applied to the facts shown here any custom multiplying ordinary professional charges five or ten times under the shield of a layman's ignorance, because it is subversive of justice that charges should be so largely increased by a custom not made known at all to the patient or to her husband."—*New York Medical Journal.*

THE EXCITABILITY OF MOTOR NERVES.—The excitability of the motor nerves in different segments of their course has just been the subject of a long and carefully conducted series of researches by K. Eickhoff, of Meschede, in the Tübingen Laboratory, who has published his results in the September number of *Pflüger's Archiv für Physiologie*. Many of the older but still excellent observers experimenting on the sciatic nerve of the frog isolated and divided at as high a point as possible have satisfied themselves that this nerve exhibits a greater degree of excitability for electrical stimuli of the same strength in the upper part of its course than below, an effect which Heidenhain attributed to the section. More recently, however, those who have made experiments on the completely uninjured sciatic nerve have found that this nerve possesses the same degree of excitability throughout its whole course. Those who have experimented on some of the nerves of mammals which pursue a long course, such as the phrenic and the vagus, have arrived at the same conclusion, not only where the stimulus applied was a constant current or a breaking shock of an induction apparatus, but

also when it was of a mechanical nature. Eickhoff experimented on the sciatic nerve of the frog and applied the current of an ordinary induction apparatus, the uniformity of action of which had been carefully tested. He also examined the effects of chemical and of mechanical stimuli. The general results which he obtained were first in regard to electrical currents—that when the shock was sharp and sudden the excitability of the nerve in its proximal and peripheral segments was about the same, but for currents which slowly rose in intensity the lower segment was much less excitable than the upper, the strength of the current having, in fact, to be about doubled to obtain the same result. As to chemical stimuli, on the other hand, they undoubtedly acted much more strongly below than above; weak chemical stimuli, indeed, acted inhibitorily upon the muscle when applied to the upper portion of the nerve, and caused relaxation of the muscle. Persistent tetanus was rarely seen, and then only after the action had been long continued. Mechanical stimuli, such, for example, as from 150 to 400 milligrammes falling from different heights, as from one to several hundred millimetres, always acted more strongly when made to strike the nerve at its upper part than below; smaller weights falling from correspondingly greater heights, and hence with considerable velocity, acted more strongly than heavier weights falling less distances and therefore with less velocity. What conclusions can be drawn from these results of experiments in regard to the nature of nerve excitation? asks Mr. Eickhoff. In a strict sense, he admits, none; but he points out that if the water from a reservoir passes through a long tube made of different materials and with walls varying in thickness though having everywhere the same lumen, the water will flow equally and continuously; but if a weight presses on a thin-walled portion of the tube it will compress it, or, supposing the tube to be very thin-walled, it may possibly undergo dilatation, as by removal or reduction of the pressure of the atmosphere, and we may consider the action of different stimuli upon nerves to be explicable in the same way. One stimulus may promote, another may reduce, the excitability of a nerve, and so, as Gotch and Macdonald have remarked, we can not correctly speak of the varying excitability of one and the same nerve in different parts of its course without knowing the nature of the stimulus which has been applied, for the part of the nerve stimulated may react very differently towards different stimuli. The nerves can no longer be regarded as mere telegraph wires in which various processes differing only in regard to their strength originate and travel; but, as Hering has quite recently advanced in his "Theory of Nerve-activity," they must be considered as fasciculi of living arms which are extended from the elementary units of the nervous system—that is to say, the ganglion cells—and are capable of qualitatively different excitation. Hence our conception of the excitability of a nerve must progressively widen, and should not be limited to the question of how a nerve reacts to an opening induction shock.—*Lancet*.

THE DANGERS FROM INFECTIOUS DISEASES IN PUBLIC LIBRARIES.—The danger of infectious diseases being acquired through the books of public libraries, especially circulating libraries, has been under consideration for a number of years. The recent report of the deaths from consumption of several clerks who had been engaged in sorting old files of books and MSS. is a practical demonstration that forces upon the guardians of public libraries grave responsibilities and additional duties. Experiments have been made looking to the discovery of the best method of disinfecting books; a method that would be efficient and at the same time not injurious to the volumes subjected to the disinfectant. The *Medical News*, August 8, 1886, published a series of experiments showing that formalin was the agent par excellence for use in this work. It neither discolors articles subjected to its action nor does it render them more liable to the corrosive action of time. On the other hand, it renders articles subjected to treatment entirely clean. The time has come, therefore, for all public libraries to have attached to them a disinfecting plant where all books, pamphlets, magazines, or documents that have been taken from the library may be thoroughly disinfected before being returned to their shelves.—*Medical News*.

THE RULES AND REGULATIONS OF THE THIRTEENTH INTERNATIONAL CONGRESS OF MEDICINE TO BE HELD IN PARIS, AUGUST 2-9, 1900.—All doctors of medicine may become members of this Congress by making the proper application and paying Five Dollars. The Secretary General in Paris has instructed the American National Committee to receive the applications of American physicians and to return a receipt for the amounts sent. These applications and the money are then to be forwarded to Paris, and in due time cards of admission to the Congress will be distributed to all subscribers. Members desiring to present papers will forward them to the Secretary of the Section to which they belong, for each Sectional Committee reserves the right of drawing up its own working programme.—*Ibid*.

RABIES SUBSIDING ABOUT BUFFALO.—State Agent M. Quigley, of Buffalo, stated on November 1st that the cases of rabies in Erie and Niagara counties are being steadily stamped out. He accords considerable praise to the police of the city of Buffalo for their effective work in capturing and muzzling rabetic dogs.—*Ibid*.

"COCA" has maintained its reputation as a powerful nerve stimulant, being used with good results in nervous debility, opium and alcohol habit, etc. The highly variable character of the commercial drug makes it uncertain, however. Robinson's Wine Coca (see advertisement in this issue.) we believe to be a uniformly active article, it being prepared from assayed leaves, the percentage of Cocaine being always determined by careful assay.

SANMETTO IN PROSTATITIS, CYSTITIS, CHRONIC GONORRHEA, AND VESICAL IRRITATION.—I take pleasure in saying that Sanmetto in my hands has proven its superiority to other remedies in prostatitis, cystitis, chronic gonorrhea, and general vesical irritation. I prescribe it with confidence every time, and in cases not attributable to mechanical causes I feel sure of relief every time. In gleet its action is marvelous, the worst cases yielding readily, and I shall continue its use.

Anderson, Ind.

ORAN E. DRULEY, M. D.

THE AMERICAN PRACTITIONER AND NEWS.

"*NEC TENUI PENNÂ.*"

VOL. XXVIII. LOUISVILLE, KY., DECEMBER 15, 1899. No. 12.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—*RUSKIN.*

Original Articles.

HYGIENE OF THE NOSE.*

BY W. CHEATHAM, M. D.

The nose is one of the most important organs of the body. By its exposed position and the offices it has to perform it is rendered one of the open doors of infection, and yet we hear of but little as to the importance of keeping it clean. We are taught the importance of hygiene of the mouth, of the body, and of the hair, but little concerning the nose, which is the "rubber-neck" which is expected to discover any laxity of cleanliness of other parts of the body or the air around us. When we consider the offices of the nose, that it is for olfaction, audition, phonation, respiration, and is much concerned in taste, sight, and digestion, it will be seen that an obstructed nose will affect almost every organ of the body. All of us know how dull our brains are if we have nasal stenosis. Hygiene of the nose has much to do with this. Of course, if the obstruction is from bone, cartilage, or growths, simple hygiene will not give relief, but it might have prevented much of it, and after the removal of the cause will prevent recurrences. Unless the nose is kept well open and clean the olfactory nerves can not do their work. When smell is destroyed or interfered with it is best not to follow that advice of old, to "follow your nose," as it might lead you into trouble. If smell is not correct, taste is much interfered with, and also digestion. If there is not free nasal respiration, mastication and deglutition are defective.

* Read before the Louisville Medico-Chirurgical Society, November 3, 1899. For discussion see p. 464.

We are all aware that a majority of diseases of the middle ear depend upon diseases of the nose. These often lead to disease of the pharynx and larynx. With some of the ear complications comes tinnitus, which produces insomnia and makes neurotics. Vertigo is a not infrequent complication of disease of the ear, which is the result of nasal trouble, all of which might have been lessened by proper nasal hygiene in the young.

The mouth-breathing infant can not feed on account of defective nasal breathing. When the throat is full of ugly mucus, or muco-pus, on account of adenoids, which interfere with nasal drainage, and consequently nasal hygiene, the latter of which is never attempted, can any one tell me where it is to end if not corrected? Tearful eyes, suppurating ears, bad digestion, stunted growth, malformation of face, stupid brain! Do but few parents understand the cause or its correction? Why not? Because they are not taught. Let something happen to the little one's teeth, though, and how soon the dentist is called in!

The obstructed and unclean nose not only interferes with phonation in the manner already referred to, but it acts as a sounding-board, and any obstruction in the nose produces dead notes. You are said to be talking through your nose, when you are not. Proper nasal hygiene will prevent much of this.

Improper nasal hygiene may produce so-called asthenopia; not only that, but inflammation of the tear-sac, conjunctiva, cornea, and of almost every part of the contents of the socket. Who can say that proper nasal hygiene might not have prevented much of this? There are, of course, associated conditions, dyscrasias, etc., which have much to do with these complications. I have not yet gotten to believe that any one organ of the body can be dissociated from the others. The patient's general condition has much, yes, very much, to do with diseases of the nose and their complications. Probably the nose's most important office is that of respiration; it filters the air, renders it more moist, heats it, destroys many bacteria and cocci, and delays the growth of many others; it removes from the impure air many foreign substances.

The average nose in our climate, in twenty-four hours, secretes from twelve to eighteen ounces of fluid. Much of this is taken by the air into the lungs. It serves also to destroy bacteria and cocci, and to catch particles of dust, etc. Air passing through the nose, no matter how cold it is externally, when it reaches the pharynx and larynx is

heated to about body heat; that is, in normal respiration. It has been proven that a normal nasal secretion destroys many bacteria and cocci, and delays the growth of many others. This secretion, if not kept normal, loses this effect, and instead becomes a good fluid for their cultivation. Almost all kinds of pathogenic germs found in other parts of the body are found in the nose, many of the most dangerous commonly so, others more rarely. This being a fact, can any one doubt the importance of nasal toilet? Can any one state how many cases of diphtheria, scarlet fever, measles, and other such diseases can be prevented during epidemics by proper nasal lavage? Epidemic meningitis is another disease which in many cases might be prevented by the use of some simple nasal spray, say even salt water, and especially Dobell's solution or fluid. The nose and brain are closely associated. The nerve and blood-supply are not only quite intimate, but between the two there are only two membranes and a very thin plate of bone. What might not proper nasal hygiene prevent? The nose is really one of the filthiest parts of the body, yet who teaches its cleanliness? The mother teaches her child how to keep the body clean, how to attend to the teeth, hair, and ear, but says little about the nose. Why? Because she is not taught.

The nose is not an easy organ to clean. It stands often but little interference; the mildest solution often causes bleeding, and produces soreness about the wings. The turbinal bones are so placed and shaped that it is very difficult to reach over and under them; in fact, there is but one way to do it thoroughly and safely, and that is from behind forward. I say safely, and yet that method is not safe, as fluid is liable to be forced into the ear and the sinuses. This method and the nasal spray, though, I consider the most thorough and safe. The cry recently, "Down with the spray," is, I think, a mistake, because no better and safer method is offered as a substitute. The douche is thorough, but, unless the nose is well open and great care exercised, the fluid used will enter all the sinuses and force the unclean secretions ahead of it. All of us have seen such results. The oil sprays are I doubt of much service except in a few cases. The douche, theoretically and practically, is the best cleanser, but it is, as we all know, dangerous. The danger is much lessened if it is used from behind forward. There are but few patients who can use it this way. I believe the water spray is the best. It is not well to use much force in cleansing the nose; the parts are easily bruised. Instead of

using force we must depend, in a majority of cases, upon mild alkaline and saline solutions to dissolve inspissated secretions and to excite exosmosis. Whatever method is used, do not let the patient blow the nose much immediately after the cleansing; snuff back and get all the solution from the mouths of the eustachian tubes and the openings of the sinuses, then blow. I have seen several cases of "hay fever" much benefited by one of the simple solutions used in a spray. I have had many to tell me that, by using the spray all the time, the severity of the attack was much decreased. Powder insufflations as cleansers are, I think, of little good. Again I repeat, the spray is the better for general use. It should be used three times a day at least. After one has been out in the dust a simple spray is of much comfort, and, if used properly, may save a great deal of trouble. Nasal hygiene in early life is much neglected. If properly carried out, much trouble in after-life can be prevented.

LOUISVILLE.

GALL-STONES IN THE COMMON DUCT: THEIR DIAGNOSIS AND TREATMENT.

BY F. WARREN SAMUEL, A. M., M. D.

Professor of Surgery and Clinic, Kentucky School of Medicine; Surgeon City Hospital; Surgeon to Kentucky School of Medicine Hospital, etc.

At a meeting of this Society one year ago I presented a paper upon "Gall-stones: their Etiology, Diagnosis, and Treatment," dealing then mostly with stones in the gall-bladder. This evening I wish to deal solely with stones as they appear in the common duct. So much work has recently been done upon the common duct, both experimentally and at the operating-table, and our knowledge has been so vastly added to, that the surgery of the biliary passages has so far advanced that the indications for intervention have changed the complexion of a disease which half a decade ago was considered hopeless.

While gall-stones when located in the common duct are far less frequent than in the gall-bladder or cystic duct, the serious disturbances from obstruction to the flow of bile and the remote consequences are so great that no comparison can be drawn between surgery of the gall-bladder and common duct as to the gravity of the operation. To detail my cases to you this evening would be, in a great part, a monotonous repetition; therefore I have, on the other hand, decided to pre-

sent to you the most notable features in their symptomatology and the condition found at the time of operation, with a few remarks upon the surgery of the common duct as a more interesting basis for discussion.

The Frequency of Choledochus Stones. The ratio between gall-stones observed in the gall-bladder alone and the common duct is a wide one. Dr. Fenger, quoting Courvoiser, states that Fiedler, in eight hundred autopsies, only found gall-stones in the common duct in two cases. Courvoiser, in two hundred and fifty-five cases of cholelithiasis, found in ten cases alone stones in the common duct. Conradi, in ninety-seven cases of gall-stone, found common-duct stones only five times. Kehr of Halverstadt, in one hundred and seventy-four operations for gall-stone, found common-duct stones in thirty cases, an exceptional experience. So far as I can ascertain, Fenger, with a vast experience, only reports six cases. In fifty-four operations upon the gall-bladder and ducts I have opened the common duct in eight cases for stones. This extends over a period of eight years and a half. It is evident from the literature of the subject, taken from the experience of careful observers with a large field of work, that stones in the common duct bear a small ratio to those found in the gall-bladder and cystic duct. While common-duct stones are greatly in the minority, the seriousness of the symptoms and remote consequences will make themselves felt by reason of the gravity of the operation, especially at times. I say at times, because there are cases where pathological conditions contiguous to the common duct will add danger to the operation when an attempt is made to isolate the duct and remove the stones. In the cases operated upon by me the following symptoms were notable, and mostly common to all. I might add here that in only one did I venture to make the diagnosis of a choledochus stone.

History. In every case a history of chronic indigestion was given preceding the so-called gall-stone attack. Colic was a very prominent symptom; the location of the pain was far from constant. In the six cases in which there were associated stones in the gall-bladder it was referred to the epigastrium, with great tenderness, during an attack, over the gall-bladder; in the remaining two cases pain was referred to the epigastrium, or about the umbilicus or the right lumbar region and in the back. In three of the cases pain and tenderness remained in the epigastrium for a week or more after the colic had subsided, and was present in a slight degree in all at times. In three cases it had not subsided before the beginning of another attack. It was always of a severe

nature and of an intermittent character, except in one case it continued for seventy-two hours. Icterus was present in all, and was a cardinal feature, being intermittent or remittent. In two cases it was present at the time of operation, and had been so in one case for six months before the operation; in the other, three months; no tendency to bleeding in either of these cases after the operation—so-called cholemic hemorrhage. Nausea was present in a mild degree in six cases; in one case vomiting occurred, in which relief was noted for a short time. Position did not seem at any time to relieve the pain. Loss of weight was noticeable in every case. Fever was present in all the cases, and was of the intermittent or remittent type. The renal excretion was characteristic, and in all during an attack of so-called gall-stone colic the stools were clay-colored.

The most important conditions noted at the time of the operation were as follows: In all save one the gall-bladder was contracted or atrophied, and when it contained stones it was contracted down upon them tightly. In one case, in which no stones were found in the gall-bladder, it was either obliterated or so small and so hidden in dense adhesions as to have evaded my search. In the remaining one the gall-bladder was large, containing eighteen stones and a least a pint of glairy fluid of the consistency of glycerine. In those that were contracted only a dram of fluid, slightly bile-stained, was found. In all save two only one stone was found in the common duct, and were movable, demonstrating perfectly the ball-valve action of the floating choledochus stone first pointed out by Fenger. In one case four large stones and several very small ones were taken from the common duct, and in the case where the gall-bladder was apparently obliterated forty-four stones were removed through an incision into the common duct, which was so dilated and enlarged as to make me believe that the dilated cystic duct and the common duct had become one large cavity. It will be noticed that in all these cases the gall-bladder was very much smaller, except in one case, in which a large, single oblong stone was removed from the common duct, which completely produced obstructions from impaction, preventing the flow of bile. The jaundice in this case was so intense and lasting that I feared cholemia would supervene. Gall-stones were found in this case in the gall-bladder, associated with common-duct stone impacted. Adhesions were found between the viscera in every case, requiring the greatest care to avoid injury to attached organs. In each case thickening of the duct-wall

was noticed, and was dilated in all except one case, where a small floating stone was removed. Sutures were used in only two cases, and were satisfactory in one only; and in the last two suturing could have been more easily accomplished, but the condition of the ducts required drainage, therefore suturing was omitted, as the gall-bladder was not drained.

In two cases the common-duct stones were not found at the first operation, and only a cholecystotomy was done; relief failing, a second operation was done to relieve the common duct of the stones.

The symptoms and diagnosis of stones in the common duct, differentially speaking, from stones in the gall-bladder and cystic duct have formerly been neglected. It is only within a comparatively recent period that an effort has been made to differentiate and classify the stones in the biliary passages. So far as our knowledge goes, we are indebted to Courvoisier for our classification and symptomatology of common-duct stones; also to Fenger for valuable work done lately in this line. Gall-stones in the gall-bladder, so long as no infection occurs, rarely ever give any disturbance, and are not attended with icterus. When they produce a disturbance, infection has taken place, plus suppuration, which causes the so-called classical gall-stone colic (Fenger). When they occur in the cystic duct in upper half, they produce an icterus (Fenger). When they become impacted at the junction of the cystic and common ducts, they produce icterus by compression; they produce icterus by impaction when in the hepatic duct; they produce icterus in the common duct by impaction and by ball-valve action. The condition of the gall-bladder in stones of the common duct is important, being found in nearly all cases atrophied, with the absence of tumor and tenderness in the gall-bladder region, and points to a choledochus stone, complicated (Courvoisier, Fenger). According to Courvoisier, icterus is the most important symptom of choledochus obstruction. A number of small stones may cause complete obstruction, but a large stone will, either by impaction or by ball-valve action (Fenger), cause complete obstruction, with intermittent or remittent icterus. During the time of the obstructions to the outflow of bile by the stone we have the hepatic colic, icterus, clay stool, bile-stained urine, and the bile-stained conjunctiva. This constitutes the so-called gall-stone attack. This may last from a short period to an almost indefinite time, until relief from the obstruction is obtained, when the symptoms subside for an indefinite period; but if, on the other hand, these symptoms recur

at short intervals before the icterus has cleared up, it points to a floating choledochus stone (Fenger). Continuous jaundice, persisting for so many months, may be caused by a stone or non-calculous adhesion. If it lasts two years or more without signs of cachexia, it is due to stone and not malignancy (Tait), and points out that the existence of icterus, lasting for years, indicates stone rather than tumor.

Colic is the natural courier of sudden icterus. Continuous attacks of colic point to an occlusion in the common duct; when temporary, to a floating choledochus stone; when permanent, to impaction, which is rare; loss of weight, which has been constant in my experience in all gall-stones found in the biliary passages, is, I believe, due, as explained by Fenger, to ptomaine intoxication interfering with the function of nutrition.

The intermittent or remittent character of fever following or preceding biliary colic and icterus is yet a disputed point. Weight of opinion seems, however, to indicate that it is due to absorption of the products of inflammation produced by infective desquamative angio-colitis, as the stones always contain some form of bacteria, especially the colon bacillus. The stone causes mechanical destruction of the epithelium; infection enters the duct-wall; inflammation ensuing causes the plastic infiltration, which accounts for the attending formation of adhesion between the different neighboring viscera.

Treatment. It is only recently that the anatomy and pathology of this region has received the attention that it merited, as can be ascertained by looking over the literature, the great mass of which has been accumulated within the past few years. We owe much to Courvoiser and others for the sound basis upon which they have put surgery of the common duct, making obsolete many procedures that have been in vogue in the past. Since Courvoiser has taught us the feasibility of opening the common duct and suturing it or draining it, as the case demands, such operations as cholecyst-enterostomy, etc., will become obsolete, and cholecystotomy and choledochotomy will be all the nomenclature we will need, saving in those non-operable cases of cancer and complete destruction of the duct—so-called stenosis; when feasible, in such cases as the last cholecyst-enterostomy may be done to relieve distressing pain from obstruction. These cases, however, will certainly be rare.

Obstruction of the common duct by impactive stone, or floating stone, was a very serious surgical problem until choledochotomy was

suggested in 1884 by Langenbach, but first definitely planned and carried out by Courvoiser in 1890. The success attained by him placed it at once at the head of all surgical procedures for stone in the common duct.

Much experimental work has been done lately to define the anatomy of the biliary passages and their relation to contiguous structures, until at present our knowledge is well-nigh perfect.

In conclusion, I wish to deal briefly with a few of the important steps in the operation, giving you my personal preference from actual experience. First, let me deal with the abdominal incision. A great many incisions have been planned and carried out of late, with a view of a better exposure of the bile passages, in order to admit of room for manipulations of structures so deeply situated; the old incision parallel to the free border of the costal cartilages, and the straight incision at the outer border of the rectus, have been relegated to the past, for obvious reasons. The incision I prefer and have adopted is one that divides as few important structures as possible, preserving muscles and the lower intercostal nerves, and gives ample room for exploration of ducts and gall-bladder. The incision begins opposite the eighth or ninth costal cartilage and extends to two and a half inches above the umbilicus; making an angle, it is extended along a line parallel to the free border of the costal cartilages; it divides the outer border of the rectus, and cuts through the rectus at the lower angle of incision. When the abdominal cavity has been opened, the gall-bladder is located immediately, if possible. Sometimes from the adhesion and atrophy in common-duct stones this is very tedious and difficult; after the adhesions have been dealt with the liver must be lifted up and held, while the finger is pushed through the foramen of Winslow and the common duct, and its vessels hooked up or worked up on the finger and examined. Weller Van Hook has carried out a plan of inflating ducts through an opening in the gall-bladder which I believe will be found valuable when the ducts are difficult of exposure. When the stone in the common duct has been located, and the duct brought *in situ* for operation, it should be opened, great care being exerted to prevent tapping the vein or artery that accompany it, which, with care, should not be difficult. When a stone has been found do not delude yourself with the text-book advice, and waste time in trying to push it back into the gall-bladder, nor try the other expedient of pushing it into the bowel—the former a bare possibility, the latter an anatomical impossi-

bility. I do hope ere long to see such advice expurgated from special chapters in general text-books on surgery, for let us remember that the duct, as it passes through, will hardly admit a fine silver probe, and that the stone small enough to pass will, in all probability, pass itself, or never cause symptoms demanding intervention. Again, do not lose time with probes to find more stones, but use the fingers to find them and bring them up to the opening in the duct. From my own personal experience I fail to find necessary the expedient of using sutures to close the duct opening, only doing it when it is easier and does not necessarily prolong the operation. Believing that just as good results are obtained by drainage, I would add that my experience forces this conclusion upon me: That when a choledochotomy is necessary a cholecystotomy is called for to drain a gall-bladder that is diseased, and to continue the drainage for a greater period of time than is usually suggested, because it is essentially a secreting organ, and is primarily, I believe, the starting-point for future trouble. The only exception is absence of gall-bladder or contraction making drainage impossible. Where the ducts alone are drained it should continue from four to eight weeks; in either case irrigation should be done daily, but not necessarily continuously. I have now done eight choledochotomies without a death, and in only one have I successfully sutured the duct; the remaining seven did equally well by virtue of the perfect drainage allowing the ducts to assume a function and become normal more rapidly. If suturing is done, drainage will be a safeguard for a limited time; if, on the other hand, suturing of the duct is perfect, all the more would I advocate drainage through the gall-bladder. In the two last cases both women were pregnant, one two months and one four months. Their recoveries were uneventful.

LOUISVILLE.

QUAIACOL IN THE TREATMENT OF MALARIA: WITH A PRESENTATION OF FOUR CASES.*

BY CHARLES J. WHALEN, M. D., LL.D.

It seems unnecessary for me to refer to-night to the history of malaria, as you are all familiar with the parasite of the disease, discovered by Laveran in 1880.

In considering malaria from a clinical standpoint, it may be divided into the following forms: First, intermittent; second, pernicious inter-

* Read at a meeting of the Chicago Medical Society, May 31, 1899.

mittent; third, remittent; fourth, pernicious remittent; fifth, typho-malaria; sixth, malarial cachexia and irregular forms.

The clinical manifestations of malaria may also be classified, in reference to the length of time between paroxysms, into, first, quotidian, produced by the segmentation of two groups of tertian organisms on successive days; second, tertian, produced by a single group of tertian organisms; third, quartan, single, double, and triple, produced by the quartan parasite; fourth, irregular or continuous, produced generally by estivo-autumnal parasites. The first classified variety is much more complete.

Intermittent fever is caused generally by the tertian or quartan parasite, rarely by the estivo-autumnal. It is characterized by complete disappearance of symptoms between paroxysms. Its course may be divided into three stages: First, the cold stage; second, the hot stage; third, the sweating stage.

The first stage may appear suddenly or come on gradually. It is characterized by sensations of heat and cold, while the thermometer records a rise of internal temperature; this is preceded by headache and general malaise. During the onset the face is pale and pinched, the skin is cold and clammy, and of the goose-quill appearance. The pulse is weak and rapid. Abundant covers will not relieve the feeling of coldness of which patients complain. The patient shakes virtually all over the body; the teeth chatter and coherent speech is impossible. The superficial temperature is found to be subnormal, caused probably by the constriction of peripheral vessels, resulting in great congestion of internal organs, especially of the spleen and liver. In some instances it may last but a few moments, associated with simply a chilly sensation or a feeling of weakness, or it may last from one to five hours. I can not see that there is any relation between the severity of the chill and the following hot stage.

The second stage is characterized by a gradual rise in temperature to as high as 107° F. The face is flushed, the pulse full, rapid, and strong, and frequently dicrotic. When the fever runs exceedingly high the patient may sink into a comatose or delirious state.

The third stage follows the fall in temperature, and is ushered in with profuse perspiration. This commences upon the face and forehead, but soon the whole body is bathed in sweat, which often soaks the bedclothes. During this stage the patient experiences great relief. The headache, muscular pain, vomiting, tender abdomen, and splenic

tumor disappear. This is due, in all likelihood, to relaxation of the peripheral blood-vessels, which relieves the internal congestion. After the perspiration has ceased the patient is greatly prostrated. This stage lasts from two to twelve hours. During apyrexia the temperature is generally subnormal.

In the intermittent pernicious fever the classification given in the American Text-book of the Theory and Practice of Medicine seems to me the most complete, and is as follows: First, bilious; second, hemorrhagic; third, algid; fourth, asthenic; fifth, comatose.

In the bilious form severe abdominal symptoms are present. There is generally flatulency and tenderness over the abdomen, associated with vomiting of large quantities of bile and watery discharges from the bowels. The liver and splenic areas of dullness are much increased. Jaundice may occur within a few hours after the paroxysm.

The hemorrhagic form is nearly always grave. Hemorrhages may appear from the nostrils, mouth, stomach, skin, rectum, or kidneys. Suppression of urine soon follows, with violent headache, delirium, coma, Cheyne-Stokes respiration, heart failure, and pulmonary edema and death from uremic and malarial poisoning.

In the algid form great prostration is present, associated with purging, vomiting, and muscular pains. Temperature may be normal or even subnormal; urine is often diminished or even suppressed. This condition may persist, with slight exacerbations of fever, for several days.

The asthenic form is accompanied by great nervousness and feeble heart action.

In the comatose form the patient may immediately enter a comatose state, from which he can not be roused. If the first attack is survived, the second is certain to prove fatal. This form may be present in any of the preceding types.

The same stages characterize the remittent forms of malaria as the intermittent, with the exception that the temperature rarely falls below 100° F. This form of the disease is associated especially with the second cycle of the estivo-autumnal organism. Remittent fevers may commence as intermittent, or they may immediately assume this form after a severe initial paroxysm. The second stage often lasts from ten to twenty hours. The third stage is less prominent than the corresponding stage of intermittent fever, and between attacks the patient is not so free from symptoms. They complain of fever, nausea, vomiting, and muscular pains. The remission generally occurs at

night. The fever may subside gradually, retaining its remittent character, or first become intermittent before disappearing.

It is not necessary to describe the symptoms of pernicious remittent fever, as they are identical with the symptoms of pernicious intermittent fever.

Typho-malarial fever consists in a combination of the symptoms of malaria and typhoid fever. It begins with a chill, followed by fever. The symptoms of this disorder may be most markedly those of either of these diseases; however, the typhoid symptoms are generally most prominent, the malaria manifesting itself only in the variation in temperature. It is claimed that typhoid fever, when associated with malaria, is not as fatal as where existing alone.

Malarial cachexia, symptomatic of chronic malarial poisoning, is very varied. The most pronounced symptoms are anemia and an enlarged spleen. The blood count in some cases may be as low as 500,000 per cubic millimeter; the skin has a saffron tint; the spleen is greatly enlarged, firm and hard.

The general symptoms are those of anemia, breathlessness on exertion, edema of the ankles, and hemorrhages which may be severe. Temperature may be below 99.5° , or the fever may be irregular, temperature rising gradually to 103° .

Under the head of irregular forms are found many disorders of malarial origin, which may escape the diagnostician. It is in these that the blood examination is of greatest importance. Often the chill is entirely absent; in others the sweating stage is not present; and again both the foregoing may be absent. The entire paroxysm may be wanting, in the place of which malaise is noticed, headache, diarrhea, or vomiting, with perhaps a very slight rise in temperature, or the paroxysms may appear in the form of severe neuralgic pain. In the pure types of intermittent fever the diagnosis is usually easily accomplished without blood examination. The peculiar tertian or quartan paroxysms and splenic tumor make a diagnosis almost certain. The onset of these forms may simulate pneumonia, but later they are easily differentiated.

From a clinical standpoint, the diagnosis of the remittent and pernicious forms is at times very difficult. In many cases it is only possible to arrive at an accurate diagnosis by the use of the microscope, for they are likely to be confounded with typhoid fever, cholera, ulcerative endocarditis, pyemia, septicemia, and meningitis. In the absence of rose spots in typhoid fever—a condition which sometimes exists—it

is closely simulated by the typho-malarial form of malaria. It is probably a fact that many malarial soldiers in the late campaign in Cuba were being treated for typhoid fever. In yellow fever the characteristic symptoms, peculiar onset, black vomit, jaundice, and suppression of urine are all simulated by pernicious malaria.

Without a blood examination it would be impossible to diagnose the algid stage of malaria from the algid stage of yellow fever. Ulcerative endocarditis can be differentiated by a careful physical examination of the heart, and septicemia by locating the infection atrium. Uremia can only be differentiated from the uremia of pernicious malaria by the use of the microscope. In meningitis the coma comes on later than in comatose pernicious malaria, and in meningitis photophobia is always present.

As to the treatment of malaria, quinine has been the great panacea. But there are obstinate cases of intermittent fever observed in which quinine has no effect, and this is especially true of the parasites that have been brought home by our soldier boys from Cuba. My friends tell me that nearly all their comrades are in as bad, or nearly as bad, condition as when they reached Chicago last September; that they have grown disgusted with doctoring; that all physicians do, or try to do, is to give them quinine, and that they are as capable of treating themselves as are the physicians.

In patients with idiosyncrasy to quinine I have tried other drugs, the most important of which is methylene blue. It has no particular advantage over quinine, excepting that it is tasteless and can be administered to children more easily than quinine. During the past seven weeks I have been making a more or less extensive trial of guaiacol in the treatment of malarial fever, and, from the result obtained, I am of the opinion that in many cases it is a very valuable remedy, and that its therapeutic properties deserve wider recognition. The dose used by me in all cases varied from five to forty-five minims, beginning with five drops in capsule after meals and gradually increasing the dose unless disturbance of digestion resulted from its use. In the last few weeks I have treated four cases, all boys who were in the army in Cuba.

The first case I present to you is a friend of mine, H. G. S., aged twenty-five, single, Company H, First Illinois Volunteer Infantry, taken ill at Santiago, Cuba, July 28th, with dysentery; had his first chill August 5th at 3 A. M. Chills reappeared every morning at the same hour until he arrived home in Chicago, September 7th. He was

greatly emaciated, weighing only one hundred and fifteen pounds. He was at once taken to the Presbyterian Hospital. Physical condition very bad, spleen easily palpable. The blood examination revealed endoglobular plasmodia, with numerous pigment granules actively motile and a number of endoglobular crescents. Patient was very susceptible to quinine, which always produced symptoms referable to the brain, such as fullness in the head, frontal headache, and delirium. However, he was able to take twenty grains a day when combined with dilute hydrochloric acid. He remained in the hospital twenty-five days, and gained fifteen pounds in weight. Went to New York City, where he remained sixty days; all this time he continued to take quinine; no chill, but he claims that during all that time his whole body ached constantly. One week before departing for home he discontinued taking quinine, and while en route he had a severe chill, lasting three hours, his temperature going as high as 106° F. After his arrival in Chicago for three months he had chills about twenty-four days, at which times he was confined to his bed from four to six days. He was constantly under physicians' care, but they seemed unable to control his chills and fever. April 4, 1899, he came from Waukegan to see me. He was greatly discouraged, having had chills every other day, coming an hour and a quarter earlier each day, and one week before coming to me he had them every day.

Knowing that all the supposed specifics had failed in this case, and being doubly desirous of relieving him because he was my friend, I resolved to try guaiacol, hoping at least to control the fever. This was on Tuesday, April 4th. He began with five drops after meals; he had a chill Wednesday and one Thursday, when they disappeared. He gained in weight and strength rapidly, and was feeling so well that on May 1st he discontinued his guaiacol, and on May 4th he had a chill, which was repeated on the 6th.

This incident would seem to prove that the adult segmentating organism is not affected by the drug, while the free and growing spores constantly imbibing nourishment from the plasma of the blood are readily destroyed or prevented from entering new corpuscles. Blood examination: Fleischl's hemometer showed 40 per cent of hemoglobin. The hematocrit showed that the blood contained a little over 3,500,000 red corpuscles per cubic millimeter.

CASE 2. Tertian fever. W. B. C., aged twenty-three, married; private, Second United States Cavalry. Had yellow fever in Santiago,

July 30, 1898. After recovering from yellow fever, he began to have chills every day at first, then every other day. Had been in the hospital nearly all the time since his return home until I saw him, November 5, 1898. Blood examination revealed endoglobular plasmodia with numerous pigment cells. Physical examination showed a very tender and greatly enlarged spleen, extending six inches below costal arch. Quinine, forty or fifty and even ninety grains a day, was used to control chills, which would come every two weeks in spite of the quinine. On November 25th, while on a trip to Ohio, he had a severe attack. He passed from under my care, but still continued to take quinine in different combinations until he came to me, April 9, 1899, complaining of having chills and fever every day for a month. He had emaciated very rapidly, and was unable to retain any thing on his stomach excepting apples, which he retained and relished. His skin was a saffron yellow. Complained of breathlessness on the slightest exertion; no edema or hemorrhages. Spleen now extending nearly seven inches below costal arch. He perspired constantly. Temperature 102.5°, pulse 100. I placed him on guaiacol, beginning with five drops, increasing one drop each day. Returned April 12th; said he felt first rate; temperature normal, and had no chill since beginning guaiacol treatment. He was hungry and retained food without any unpleasantness. April 18th, temperature 99.8°; no chill since beginning treatment the last time; is now taking guaiacol in fifteen-drop doses.

April 21st—Stomach seemed a little disturbed; temperature 100° F.

April 25th—Temperature normal, gaining rapidly, appetite difficult to satisfy.

April 30th—Temperature normal, looking better, and has resumed work.

May 6th—Temperature normal, has gained nineteen pounds in two weeks, strength greatly improved.

May 14th—Has been without medicine for three days, and feels a little tired, which he blames to the damp weather, as it always affects him in a similar manner.

May 21st—Blood examination showed 50 per cent hemoglobin. The hematocrit showed that the blood contained 3,000,000 red corpuscles per cubic millimeter. Physical examination showed the spleen extending only five inches below the costal arch.

CASE 3. Quartan form of malaria. E. G. R., aged twenty-five, single; private, First Illinois Volunteer Infantry. When he arrived

home from Cuba, September 7th, he was greatly run down, weighing only one hundred and twelve pounds. Had his first chill in December, which was eight or nine weeks after arriving in Chicago. For four weeks the chills came on once a week, then two a week for three weeks, then every other day for a few weeks, then an intermission of one week. Following this, they came every day for fourteen days. Again eight days without a chill, then every day for nineteen days, then one week without any. Has noted a temperature as high as 107° F.; often found it as high as 105.5° . He came to me May 1st; had been having chills for three days in succession. Physical examination showed that the spleen extended three inches below the costal arch. Blood examination revealed hyaline bodies of irregular shape, irregularly pigmented with large, coarse granules. Hematocrit showed that the blood contained about 3,500,000 red blood corpuscles to the cubic millimeter, and the hemoglobinometer showed that it contained 50 per cent of hemoglobin. Patient claimed that he is unable to satisfy his desire for water. Borborygmus was a source of great annoyance to him, and a symptom from which he especially desired to be relieved. I placed him on guaiacol, five minims three times a day, to be increased the same as in the other cases just cited.

May 4th—Had a chill on May 2d, and had every indication of one developing to-day, but it did not mature. Notices his appetite improving, and has gained five pounds.

May 10th—Had a chill on May 6th. Is taking fourteen drops of guaiacol.

May 15th—Borborygmus entirely relieved; no chills since May 6th; has gained eight pounds in twelve days.

May 22d—Had a chill four days in succession.

May 29th—Has had no chills since last visit; is gaining in strength rapidly.

Why the same organism should cause such widely different results as is shown by this patient, I am unable to explain.

CASE 4. L. W., aged twenty-seven, Company L, First Illinois Volunteers. I first saw the patient October 8th. He gave a history of chills and fever, which began two weeks before leaving Cuba. Had a chill every three days until one week after his arrival home, when he took an Indian malarial cure, which arrested the chills, but four days after taking it he became troubled with dysentery, which reduced him from one hundred and thirty-two to one hundred and five

pounds. About the same time his chills and fever returned every three days as before. I gave him quinine in large doses, which checked the dysentery but failed to control the chills. He continued doctoring himself from November to April 17th, when he again called to consult me. He claimed that his chills came on once and sometimes twice a week. I put him on the guaiacol, as in the other cases, excepting that he began with ten-drop doses.

April 21st—Guaiacol disturbed his stomach, and he discontinued its use. Chills recurred as usual. Without advice he returned to his quinine, and as before it failed to control the chills and fever.

May 16th—Has continued to paint the guaiacol externally, and thinks his chills have been lighter in character. With difficulty I persuaded him to resume the internal administration.

May 22d—Claims the guaiacol disturbs his stomach; chills lighter in character.

May 31st—Is now taking eleven drops, and for the first time in about eight months he has been two weeks without a chill, and feels stronger. I have no doubt that the malaria will be completely controlled when we get him on the proper dosage.

As a result of my experience with guaiacol, I have arrived at the conclusion that, though I am unable to state positively that it is a specific in malarial fever, we possess in guaiacol a therapeutic agent of great value in many cases which have resisted the ordinary methods of treatment. In all the cases presented to you this evening, quinine and other remedies were unable to control the chills and fever; indeed, Nos. 1 and 2 showed marked malarial cachexia, yet the result obtained by guaiacol was immediate and lasting. Why No. 3 has not been similarly affected I am unable to say. It may be that we have not reached a dosage high enough. We will continue increasing until we come to the stage of complete toleration, as we do with potassium iodide, giving it until we get its effects. It may possibly be due to the fact that we are dealing with a different micro-organism. I think not, however, but that we have not reached a dosage high enough to control his malaria. He certainly has improved under its administration. This remedy is deserving of a more extended trial, which I trust it may receive at the hands of some of my listeners.

CHICAGO.

Reports of Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, November 3, 1899, the Vice-President, Louis Frank, M. D.,
in the Chair.

Swelling of the Limbs Following Injury to the Hip. Dr. A. M. Vance :
I would like to know the cause of the trouble in the following case:
Four weeks ago I was called to see a Jewish woman, fifty-eight years of
age, who had fallen and injured her right hip. I saw her about an hour
afterward, and thought she had a fracture. I had her removed two
days afterward to the St. Joseph Infirmary. She did very well under
Buck's extension apparatus until the thirteenth day, when I found the
thigh of the injured side enormously swollen, the most exaggerated
distension of the skin that I have ever seen, and only the thigh involved.
I took off the plaster and bandage of Buck's apparatus and shortly
afterward the balance of the leg became greatly swollen. This
increased until the thigh was at least eighteen inches in diameter,
pressing the opposite thigh over into abduction. There were no
symptoms, and nothing to account for the trouble; no pain, and no
evidence of disease. I did not do very much for the patient at this
time—simply gave her supportive treatment—and the thigh soon
diminished in size. Yesterday the healthy thigh began to swell with-
out any particular symptoms other than the swelling, which, as in the
other leg, commenced at the hip and extended downward.

The condition is entirely new to me. An ordinary edema from a
weak heart would become manifest first in the foot, usually; but here
the swelling began first in the hip on both sides. I concluded that
there must be some obstruction to the iliac vein in the first limb, and
thought the bandage around the leg and foot had controlled the swell-
ing there, but when the other leg commenced to swell without any
bandage, commencing also at the hip and going downward, I was some-
what puzzled, never having seen venous obstruction produce swelling
in the upper extremity of the leg, almost always commencing below.

The old lady has no symptoms of Bright's disease, and I never
remember to have seen more than one similar case in acute Bright's
disease, and that was a man (C. C.) who was for a long time in the city
hospital. He had acute Bright's disease, and subsequently became

*Stenographically reported for this journal by C. C. Mapes, Louisville, Ky.

edematous all over, but at first only one leg was swollen for quite a number of days.

The case is out of the ordinary, and I would like to have an expression of the members of the Society concerning it. The patient has never had any fever or any other symptoms referable to the condition present.

The Advisability of Inducing Premature Labor in a Syphilitic with Prolapse of the Uterus and Bladder. Dr. T. S. Bullock: At the meeting of this Society a month ago I reported a case and asked for advice. The patient, a woman twenty-five years of age, had advanced about eight months in utero-gestation. The question was whether or not the induction of premature labor should be done on account of great swelling and induration of the right labia, a subacute inflammation, a laceration of the perineum which was almost complete, with prolapse of the entire cervix and bladder. Doctors Cecil and Bailey, in discussing the case, thought it was proper to put the patient to bed and await developments. I intended to do this, but symptoms arose which I deemed urgent, so I sent her to Norton Infirmary and introduced a bougie on Sunday. She had been unable to stand up without the bladder being prolapsed, and without a great deal of the pregnant uterus protruding, and I was afraid that sloughing of this acutely-inflamed labia might take place, as the tissues looked very low in vitality.

As stated, I introduced a bougie on Sunday afternoon. No uterine action followed introduction of the bougie, and I removed it after twenty-four hours and introduced a still larger one. This I left in from Monday afternoon until Thursday morning, with absolutely no result. I then withdrew the bougie and inserted another larger one, wrapped with a little iodoform gauze, which was followed by labor pains within twelve hours, and that night I delivered the patient of a fetus probably a little over eight months old—a breech presentation. The cord was wrapped around the neck. Although, after the os uteri had fully dilated, delivery was prompt, on account of the absence of the pelvic floor, still the child was dead when born.

I waited for the ordinary time, and there was no uterine action. I waited for an hour, and then tried to express the placenta by Crede's method, but every time I made pressure on the fundus the uterus and bladder would prolapse. I then had the woman anesthetized and introduced my hand to remove the adherent placenta. In this manipulation I

discovered the explanation of the apparent insensitiveness of the uterus; that I had to deal with a bicornate uterus, the implantation of the placenta being in the right compartment. I suppose the explanation of my failure to excite labor pains in the first, second, and third attempts with the bougie was that the instrument entered the unimpregnated horn of the uterus. The bicornate uterus was easily demonstrated, the impregnated compartment extending up in the right side, and the non-impregnated compartment being to the left.

I neglected to state that at the time I withdrew the bougie from the second introduction (on Monday) the right labia spontaneously ruptured, and quite a large quantity of pus was discharged. I was very much concerned for fear there might be an infection from this source, and during the progress of the labor I had the right labia covered with gauze wrung out of bichloride solution. The necessity of introduction of the hand and peeling off the placenta was that it was completely adherent. The procedure was quite difficult, and I know was not thoroughly accomplished, but was the best that could be done under the circumstances. I remembered the view taken by Dr. Turner Anderson, that it is better to leave some little portions of the placenta than run the risk of doing too much damage to the uterine wall by too persistent efforts. After removing all the placenta I could, I gave her an intra-uterine douche of bichloride solution, followed by plain water. The woman went along and recovered, much to my surprise and gratification, without an untoward symptom. A little fever developed on the third or fourth day, I suppose due to the appearance of milk in the mammary glands. The breasts were treated by means of the ordinary belladonna ointment and firm pressure, and she had no further trouble. I have kept the woman in bed for quite awhile, and intend later to do some plastic work, and probably a ventro-fixation or something else to keep the uterus up and to deal with the chronic labial inflammation.

Dr. Windell, under whose care this patient formerly was for specific disease, told me that she had had numberless vulvo-vaginal abscesses, so much so that when I first saw her the whole right labia was chronically inflamed and enlarged. She had a child several years ago, since which time she has had a number of miscarriages.

The question I desire to ask is, What probably caused the death of the fetus in the present instance? The woman was syphilitic, but the fetus showed no evidence of the disease.

Discussion. Dr. Turner Anderson: The explanation given by Dr. Bullock as to the apparent insensitiveness of the uterus is probably correct, viz: that the bougie was introduced in the compartment which was unimpregnated. Death of the fetus was, in all probability, due to the cord being passed around the neck in a double turn. I am sure this is the cause of so-called stillbirths in quite a large percentage of cases. It is a condition which we can not recognize in advance. The cord may be passed around the neck and then carried up around the body in such manner as to interfere with circulation. Of course, a rule recognized by all obstetricians is as soon as the head is out to pass the finger up around the neck of the child to ascertain whether or not the cord encircles the neck; the progress of labor is then watched carefully, and matters expedited if it seems necessary.

We have all encountered cases of bicornate uteri. I had a case some time ago in which I suspected, from the irregular contractions of the uterus, that there was a condition of this kind by the manner in which the fundus behaved at the termination of labor, where the placenta was expressed in the ordinary way, but where there was not the symmetrical feel that we would ordinarily expect to find. I induced premature labor in a woman who had an uncontrollable albuminuria on three occasions several years ago, and the last time, when she was four months pregnant, she suffered from intense albuminuria; she was almost blind, she had chronic Bright's disease, and labor was induced with some difficulty. It was found that she had a bicornate uterus; that she was pregnant normally in one compartment, and that there were twins in the other. It was necessary to introduce the hand and remove the placenta from the compartment in which the double impregnation had occurred. The placenta from the other side came away without trouble. That was an interesting case. The woman died shortly afterward from chronic Bright's disease, and, unfortunately, we did not have an opportunity of securing a post-mortem examination.

I do not see how Dr. Bullock could have managed his case any better. Where we have a case of uncontrollable albuminuria, where we have grave nervous disturbances presenting themselves, I believe it is our duty to relieve the patient of her burden. We ought not to hesitate about the matter. If the patient has passed the seventh month of utero-gestation, we should induce labor with much less hesitancy than in the earlier months of pregnancy. There are cases of chronic Bright's disease complicated by pregnancy in which the induction of premature

labor offers the only hope of relief. I think Dr. Bullock was perfectly justified in the course pursued in his case.

Dr. A. M. Vance: I remember in one case I had to take a catheter out of the uterus of a patient. The catheter had been introduced for the induction of premature labor because of the existence of a pelvic tumor. The catheter, at the time I saw the patient, had been *in situ* three days. Sometimes a catheter may be introduced into the uterus and may remain there a long time without exciting labor. In the case referred to, labor was finally induced after several introductions of the bougie. I believe Dr. McMurtry subsequently removed a uterine fibroma.

Dr. J. G. Cecil: It is more than probable that the explanation of the insensitiveness of the uterus mentioned by Dr. Bullock is correct; still, as stated by Dr. Vance, pregnant uteri are often extremely tolerant of foreign bodies like catheters, bougies, etc. The general practitioner often sees such cases after attempts at criminal abortion. I remember a girl who was brought to the city hospital during my term of service there as interne. She had used the spindle from an old-fashioned spinning-wheel in an effort to induce an abortion. She had introduced it into the vagina, and had made at least twenty or thirty punctures about the vaginal walls, cervix, etc. The entire cervix had the appearance of having been filled with a load of buckshot, and it was in a suppurative condition. She was then seven or eight months advanced in utero-gestation, and, of course, we all thought labor would be promptly induced as a result of the patient's own acts. This, however, proved not to be the case. Under simple warm water injections and the use of antiseptics the wounds healed, and the patient progressed to full term, and was delivered of a living child without difficulty.

The general practitioner also often sees cases where attempts at abortion have been made by the introduction of catheters or probes, which have remained *in situ* for several days, and yet labor has not been induced. An explanation of this may often be found in the difficulty encountered in introducing a rubber instrument like a catheter or a probe, in that it doubles upon itself, not entering the uterine cavity, and therefore no uterine action is produced; whereas if the catheter or probe passed up along the uterine wall, separating the membranes, it is much more likely to induce labor pains. It should also be remembered, in Dr. Bullock's case, that there was an extremely elongated cervix, and possibly he introduced the probe the ordinary length or depth that is

usually necessary, and yet it did not extend as high as was necessary to reach the uterine cavity. Again, possibly the prolapsed condition, the soddened, thickened, prolapsed neck rendered it less sensitive to a foreign body. All of these are simply points which might, in a measure, explain why it was so hard to induce labor.

Dr. T. S. Bullock: The point mentioned by Drs. Vance and Cecil is one that I have noticed repeatedly, that the uterus is sometimes extremely insensitive. It will be remembered that Dr. Anderson reported a case to this Society recently, where he operated for a vesico-vaginal fistula, in which he not only repaired the damage done but introduced a sound several times into the uterus; still the woman, who was pregnant at the time, went on and was delivered at full term in spite of the handling and manipulation of the operator, it not being suspected at the time that she was pregnant. I have noticed on one or two occasions an extreme insensitiveness of the uterus to the introduction of a bougie, where I know it was properly inserted, because it was withdrawn and reinserted to see if it had curled up at the first introduction. I remember a case of atresia observed at the University clinic in which it was deemed advisable to induce labor in the early part of the eighth month. We introduced a large bougie, which was allowed to remain for forty-eight hours before any uterine action was apparent.

In the case reported, when I found that the woman had a bicornate uterus, I naturally supposed I had introduced the catheter into the undeveloped horn. It did not curl up, because it was withdrawn and reintroduced to be sure that it had properly entered.

The case mentioned by Dr. Anderson, where the woman was pregnant with twins in one compartment of the uterus and had a normal pregnancy in the other, was extremely interesting. The woman was pregnant at four months; she had a single cervix, and the uterus not being very large, it was exceedingly difficult to tell exactly what we were dealing with.

In the case I have reported I could not have made the diagnosis of bicornate uterus unless I had introduced my hand to remove the placenta. Previous to that time I had attributed the position of the uterus to an ordinary lateral obliquity of the uterus.

The essay of the evening, "Hygiene of the Nose," was read by William Cheatham, M. D. [See page 441.]

Discussion. Dr. Turner Anderson: The paper causes us to think seriously upon a very important subject. I remember a number of years ago, before we had so many specialists in this department, that it was popular to treat cases of ozena, for instance, with a machine called Thudicum's Nasal Douche. At that time a patient of mine, a beautiful young lady, was kept out of society on account of an exceedingly offensive discharge from the nose. There was no specialist at that time to consult, and I attempted treatment of the case by purchasing one of these machines and using a decoction of rhatany and chloride of lime. She had no trouble from its use, nor did any of the fluid get into the eustachian tubes. I taught the patient to use it herself, and she completely recovered. She had suffered for a long time from this purulent discharge from the nose, probably the result of ulceration of the turbinate bones. She was under treatment perhaps six months. The trouble never returned. After the fortunate result in this case I began to think there was not much danger from this method of treatment.

Dr. T. C. Evans: I believe it is a very common error to presume that children frequently suffer from diseases of the nose. The great majority of cases of apparent nasal disease, or so-called filling of the nose in childhood, is due to a deflected septum or adenoids in the nasopharynx. In most cases of children we are unable to cleanse the nose properly. I do not believe that disease of the nose proper is common in children, and there are few cases where a spray can be used with much benefit in the earlier years of life. It may be used with much more benefit in adults than in children. I have found very few cases of hypertrophic rhinitis or other disease of the nasal cavity proper in children; they are nearly all diseases of the nasopharynx or deflections of the cartilaginous septum.

In regard to the post-nasal douche, I have had little experience with it. Some way my patients will not tolerate this method of treatment. It seems to be a very disagreeable thing; at least my patients have always thought so, and for cleansing purposes I prefer to put in a little more time using the spray. However, I am not much of an advocate of the spray, except in such cases that we do not know what else to do for them. We relieve more cases by operative intervention than by use of the spray, with either aqueous or oily solutions.

It would be of great benefit for the laity to read such a paper as Dr. Cheatham has written, that they might recognize the importance of matters of this kind.

Dr. S. G. Dabney: The title of Dr. Cheatham's paper scarcely indicates its contents; it sounds more like a paper on the results of nasal obstruction. He has reviewed the subject pretty thoroughly, and it is one that we hear a great deal about just now. I agree with Dr. Evans that sprays do not accomplish much in children. The great majority of nasal symptoms we see in children are due to some form of obstruction from adenoid growths. There is one notable exception in the so-called purulent rhinitis which occurs in little children from four to eight years of age, where there is a disagreeable, purulent, malodorous discharge from the nose. In these cases cleansing agents are of great value, and have to be used freely and frequently. I believe I have seen some of them cured by the persistent use of cleansing agents, the treatment extending over a long time. However, the majority of cases of nasal discharge in little children, in my judgment, come from the post-nasal space rather than from the nose itself. The symptoms due to post-nasal obstruction are just those Dr. Cheatham has described, the most important of all being those referred to the ear. Sight is not often affected by nasal lesions. A great many people believe that ocular diseases are due to some reflex disturbance from the nose. The lachrymal apparatus is quite commonly obstructed, but outside of this I do not believe there are many ocular diseases really attributable to nasal troubles.

My experience has not been like that of Dr. Evans in regard to deflected septum in children. I rarely see them except in aggravated cases of adenoid growths, where the palate is pushed high up and the septum is pushed to one side, probably as a result of narrowing of the jaw; but with this exception I rarely see a deflected septum in childhood unless the result of accident.

I use the post-nasal syringe rather freely, especially in adults with naso-pharyngeal disease, and in some conditions it is perhaps the best method of cleansing that we have.

I understood from the paper that the author would commend habitually cleansing the healthy nose with the spray. I scarcely think that is necessary, and am a little doubtful about its advantage as a rule. If the nose is healthy, let it alone; if there are no nasal symptoms, trust to the antiseptic character of the nasal mucus. All of us who do work in nasal surgery know how rare it is to have suppuration there. It is exceedingly unusual. A nasal wound sometimes heals slowly, but we rarely have pus from a nasal operation. This is probably due to the

bactericidal influence of the nasal mucus which the microscope seems to establish. A point of interest occurs to me just here, viz., the protection against the infection by invasion of germs through this channel. I can see where a child is exposed to diphtheria, scarlet fever, etc., it might be wise to keep the nose cleansed by means of a spray, but in healthy cases I see no necessity for it.

In regard to the point made by Dr. Anderson, the Thudicum douche is an excellent method for cleansing the nose in cases of ozena, and I doubt if any of us have improved upon this contrivance for use in certain cases, for where you have a thick, hard crust the spray is unsatisfactory for its removal; you have to resort to the use of the forceps or use a stream. Particularly are the sprays for use of patients at home unsatisfactory for this purpose. In atrophic conditions about the nose a stream of water is of decided advantage, because the hyperemia induced by the mechanical irritation is beneficial; just the opposite is true, however, in cases where the nasal membranes are thickened, as the hypertrophy will thus be increased.

Rodsa was the first to call attention to the danger from the use of the nasal douche, stating that he had seen a number of cases of middle-ear disease produced in this way, where water had gotten into the eustachian tube, exciting an otitis media. However, if the patient is careful to hold the head in the proper position, and care is exercised not to swallow, it is still a good method of treatment. Kyle in his recent work recommends the douche in a certain proportion of cases.

Dr. H. H. Grant: Will Dr. Cheatham kindly tell us the advisability and the effect of snuffing water into the nose, as is often recommended; whether it is of any service or is safe in cleansing the nose?

Dr. William Cheatham: In answer to Dr. Grant, I have seen more accidents from snuffing water into the nose than from the douche. Only this week a motorman on the street railway came to see me with a subacute inflammation of the middle ear from snuffing water into the nose. Pure water is very irritating to the nose, and I have had patients snuff salt and water and get it into the antrum on several occasions.

Dr. Anderson is right about the douche in the treatment of ozena. One thing that Dr. Dabney did not refer to is that the nose is so open that there is less danger of any obstruction occurring, so the flow of water has free ingress and exit. I have my doubts, however, about the doctor having cured a case of ozena by means of the douche, because

the sinuses are almost always involved. His treatment of nasal hemorrhage would hardly be considered correct to-day; the best thing is to locate the bleeding point and cauterize it.

In my paper I referred to the uselessness of the spray in obstructions of the nose. Where you have a cartilaginous or bony obstruction, of course the spray is useless until the obstruction is relieved; but if the spray had been used before, the obstruction might have been prevented. I think deflection of the septum nasi in childhood is very rare.

Dr. Dabney states that inflamed eyes dependent upon nasal disease is very uncommon. In the last year I have had three or four cases of relapsing ulceration of the cornea, which had been treated by several other gentlemen for a long time and also by myself, which were afterward cured by means of chromic acid applied to the nose. I have one case of asthenopia from Tennessee that, I believe, is going to be relieved by the same method of treatment. The patient has been under the care of Knapp, Noyes, and a good many other specialists in this department with no relief. I believe a complete and permanent cure will result from nasal treatment. He has weak muscles and exaggerated reflexes especially. I applied chromic acid to both nostrils, and he had entire relief for five days, which he never had before under any method of treatment. I have under my care now a gentleman who has had painful eyes for ten years, being unable to use them at all for close work. Ten days or two weeks ago I applied chromic acid to the nose, and he has had no trouble in reading since. I think the nose and eyes are in some cases very closely associated.

Detached Retina—Continued Report. Dr. S. G. Dabney: I will briefly refer to a case I reported several months ago. It was a case of detached retina in a boy, twelve years old, rather anemic and illy-developed little fellow, who was treated by rest in bed, with a bandage over the eye, and iodide of potassium internally, with a successful result. I did not use pilocarpine, which has been recommended very highly. The retina became reattached, and while he has had two or three relapses, it has now become attached again, and the boy has good vision. I simply refer to the case as one of detached retina with recovery after several relapses by rest in bed, bandage, and iodide of potassium.

Peculiar Condition of the Abdominal Wall After an Operation for Appendicitis. Dr. A. M. Vance: Two years ago I operated upon a very large, fleshy man for appendicitis. He had a great deal of pus walled off in the right iliac fossa; he was so fat that it required rather an extensive incision. I took away a gangrenous appendix; the wound healed, making a very firm scar in spite of the opening where a drainage-tube was used. I did not see the patient again for eighteen months. He then came in to ask me about the condition of his abdomen. Upon examination I found that this man evidently had paralysis of the abdominal muscles upon that side. The only way I can express it is that the whole right side of the abdomen was without any support; it looked as if all the contents of the abdomen had settled out into a large bag on that side, reminding one of the pendulous abdomens of child-bearing women. Gentle pressure with my hands would restore the shape of the abdomen perfectly; when pressure was removed the abdominal contents would settle back into the abnormal position, bulging over the iliac spine.

I had never seen nor read of such a sequel to an operation for appendicitis, and the case puzzled me considerably. I remembered that for quite a time after the operation the man complained of pain around this side of the abdomen, particularly of his bowels becoming constipated. I have an idea that this must have been the effect of a neuritis perhaps because of the integrity of the muscles having been partially destroyed, resulting in lack of support and consequent asymmetry of the abdomen. There is no hernia; the man simply has an abdomen which looks like an enormous pregnant uterus bulging over toward the right side. It is very yielding and soft.

I have not been able to find in the literature any reference to weak muscles after an operation for appendicitis, although it sometimes occurs after separation of the aponeurosis. When the man lies down his abdomen assumes its normal contour. He wears an abdominal supporter, and gets along in comparative comfort.

Discussion. Dr. H. A. Cottell: Doctor Vance's explanation is probably correct, that there is a paresis of the external oblique, the internal oblique, and transversalis muscles; but I am unable to figure out how the operation for appendicitis could have produced such a condition. All the nerves that supply these muscles pass above where the surgery was done. The surgeon could not have paralyzed these nerves

at their origin. I never heard of a case exactly like it. Sometimes these muscles are defective; in my experience as a dissector I sometimes found the external muscle quite large, and in other subjects it is very slight.

Dr. Turner Anderson: I am very much interested in this case. I will call attention to a similar case, a very notable one, which I referred many years ago to Doctor Yandell. The man had received a stab wound, and an operation was performed, the intestine being united with the Lembert suture, and the man recovered. Years afterward he had about the same condition that Doctor Vance has described. He told me that every thing in his abdomen had gone over to the injured side; that his whole belly had gone in the direction of the left side. The stab wound was on the left side, wounding an artery of the mesentery and also the intestine. The opening was enlarged, the bleeding vessel found and ligated, the intestine sutured, and the man got well. I examined him carefully afterward, and was unable to find the slightest hernial protrusion.

Paralysis of Sensation in the Fingers Following an Injury. Dr. Turner Anderson: A man was passing through a livery stable, and just at that time another man in the loft threw down a bale of hay weighing one hundred and twenty-five pounds, and the man who was passing was struck by this heavy weight on the back of his neck and shoulders, knocking him down to the floor. He was picked up and placed in a chair, and I was summoned to see him. He was in great shock. I had him removed to his room in an adjoining building, gave him some whisky, and he was then gotten in bed. He complained of great stiffness about his neck and back, and of course I at once thought of a fracture of the spine. He could not move or turn his head in any direction without causing great agony. He came out of the shock promptly. On the succeeding day he had paralysis of sensation in the index and middle fingers of the left hand. Sensation in every other part of the body seemed perfect. He could put his arm up and move it around; he could turn his head with some difficulty; he was exceedingly tender over the seventh vertebra and above that point; he could bring his head downward with some pain, but could not move it from side to side, and he still complained of a stiffness and numbness about the neck down to the seventh vertebra.

After studying the case I thought there was an injury of the lower cervical vertebræ about the origin of the median nerve which, I believe, supplies sensation to these fingers; that there had, perhaps, been a little bleeding and a clot had formed at this point, and pressure from this caused the symptoms mentioned. He is gradually improving, but the absence of sensation is still marked. It is certainly in the posterior column, and it is in the left side, because the spinal cord does not divide here as it does near the brain. The man is walking about without much difficulty, but says he wants to know what can be done for the paralysis of sensation in his fingers.

Discussion. Dr. H. A. Cottell: Undoubtedly there has been some injury along the course of that string of sensory neurons which find their way out with the median or musculo-spiral, perhaps. I do not believe even the masters in neurology would presume to locate the lesion from this symptom alone. The trouble is probably in a posterior sensory neuron. It is a paresthesia involving the median or musculo-spiral nerve, the lesion being somewhere in the sensory portion of the cord, posteriorly as Dr. Anderson has stated.

THOMAS L. BUTLER, M. D., *Secretary.*

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Abstracts and Selections.

TREATMENT OF ANTHRAX BY MEANS OF LYE.—The *Escuela de Medicina*, a Mexican medical journal, quotes in its issue of September 15th from a paper published in the *Gaceta Medica Catalana*, by Dr. Andreu y Pahi, on a Method of Treating Malignant Pustule without Incision, without Pain, without Cauterization, and which leaves hardly any scar. Six cases are given, of which we quote the notes on the first. "R—M—. Malignant pustule on the left cheek. Had been visited by another medical man who considered his condition so grave that the last sacraments were administered. They begged of me to take charge of the patient, who I found had his face, head, and neck terribly swollen. Drowsiness was profound. I gave him an injection of caffeine and proceeded to treat him. Ordering a little dough to be brought, I made a ring some four centimeters deep around the pustule and filled it with lye made from equal parts of wood ashes and lime. This was left for four hours and then removed. The swelling became less the moment the treatment was begun, and ceased altogether by the end of thirty hours. Neither did he feel any more pain. By the end of twenty days a

scar only was left of the size of a millimeter." It is generally agreed that the most satisfactory results in the treatment of malignant pustule are to be obtained by early and complete excision of the affected part, and the mortality accompanying this method of treatment is very small indeed. But cases sometimes present themselves for treatment in which this mode of procedure is impossible or undesirable, and in such cases satisfactory results have been obtained with ipecacuanha powder. The results in the cases just referred to when treated by a strong alkali are very striking, though the value of the observation is greatly impaired by the complete absence of any reference to the confirmation of the diagnosis by bacteriological examination; but the rapid result, the absence of pain, and the small size of the resulting scar in these published cases would fully justify a fair trial of a method which claims to be capable of producing such good results.—*Lancet*.

RAPID DISAPPEARANCE OF POST-NASAL ADENOIDS AFTER INFLUENZA.—The influence of one disease on another is an interesting pathological question much in need of elucidation. A number of observations have been recorded of the co-existence of two and even three diseases, but comparatively nothing has been done in investigating the subject. All that is known can be summed up thus: When two acute diseases—exanthemata, for example—co-exist, each usually appears to run its course without being affected by the other; when an acute disease supervenes in the course of a chronic one the latter is often beneficially influenced and often cured by the former. This latter fact is not surprising, for intoxication by a drug is a disease, and conversely (according to modern views) most, if not all, acute diseases are intoxications by microbial products (toxins). Hence to cure by a disease is strictly analogous to curing by a drug. In *La France Médicale* of September 1st Dr. Chauveau has described a new illustration of the curative influence of an acute on a chronic disease—the effects of influenza on post-nasal adenoids. A child, aged nine years, had adenoids. An operation was decided on, but an attack of influenza prevented its performance. A month later when the child was examined no growths requiring operation were found. In the case of another child, aged eleven years, operation was deferred for family reasons, and influenza supervened. When the child was seen again two months later in order to have the day of operation arranged, no adenoids of appreciable volume could be discovered. A third case occurred in a girl, aged thirteen years. In none of these cases had there been any symptoms of inflammation of the growths. Dr. Chauveau could not find any similar cases recorded. But Bryson, Delvan, and Hooper have described the disappearance of adenoids after acute catarrh of the nasal fossæ and naso-pharynx. Analogous diminution of the tonsils has been described. Corominas published a case of recovery from enormous hypertrophy of the tonsils after scarlatinal angina. Dr. Chauveau concludes that in every case of adenoids in which operation is decided on and in which an infectious fever has supervened, the naso-pharynx should be re-examined before proceeding to operate.—*Ibid*.

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A CENTURY'S PROGRESS IN MEDICINE.

Beginning with Jenner's discovery of vaccination in 1796, which was one of the most important revelations in medicine up to that date, and contrasting medicine and surgery preceding that time with their present status, it will be observed that there was little to claim for them aside from their titles.

Anatomy was more thoroughly understood than any branch of the science. Physiology was in its first swaddlings, and chemistry was a sort of mysterious art about which there was but little known, and as for histology and pathology, they were not thought of. Our knowledge of materia medica was more definite, but still in a crude condition. Obstetrics was probably the most advanced branch of medical science, simply because the things peculiar to childbirth from the beginning of time had impressed themselves upon the human family—had become common knowledge to the whole race—yet there have been many changes in the art and practice of midwifery.

Physiology and pathology have become established sciences mainly through the revelations of the microscope. Chemistry has also been made an exact science in many particulars, and has enabled us to more

fully comprehend many things that were formerly very little understood. It has been especially useful in the study of physiology.

The English-speaking people have done more to advance and perfect the science of medicine than all of the other races put together. Near the close of the eighteenth century (the birth of vaccination occurred on the 14th of May, 1796) Dr. Edward Jenner startled the civilized world by announcing that he had discovered a cure for small-pox. This discovery has added thousands of years to human life.

McDowell's ovariectomy at Danville, Kentucky, was probably the first event in modern surgery of the nineteenth century to attract the attention of the world. His invasion of the sacred domain of the abdominal cavity and the recovery of his patient was the dawn of a new day in the surgical world, and has probably done more to advance surgery than any one thing that has occurred during the century, save the discovery of anesthesia, which is also to the credit of an American.

Mr. Lister taught us the most important lesson of the century, viz., that of the importance of cleanliness. We all recognize that there is nothing so important as surgical cleanliness. It has been the means of adding millions of years to human life. The perfection of the microscope has done much for medicine and surgery. It has opened up new fields for study, and has enabled us to more fully comprehend the minute structures of our bodies, and thereby we have been enabled to fully comprehend and thoroughly understand the functions of many parts of the body that were formerly not understood at all.

Koch's discovery of the cause of tuberculosis probably ranks as one of the most important of the century. Without this discovery our knowledge of this disease would have been indefinite as to its cause, and we would have been unable to combat it in any intelligent way. With our present understanding, however, it is highly probable that the time is not far distant when it will be eradicated. Knowing as we do its cause and its behavior, we can certainly lessen it to a very great degree by preventing it. Tuberculous dairy cattle will, in the near future, all be killed, and, in fact, the dairies will be inspected and kept free from tuberculous animals, and in that way the disease in the human family will decrease rapidly. This work of Koch's has been more thoroughly scientific than that of any other of the discoveries during the century, and too much praise can not be accorded Dr. Koch for his valuable contribution to our knowledge of this fatal disease. In a general way, the discovery of the germs which produce many

of our common diseases, as diphtheria, pneumonia, meningitis, and a host of other maladies, may be reckoned as being highly important in aiding us in their treatment and prevention. The introduction of serum-therapy is another innovation which is yet in its infancy, but which promises brilliant results. The most important which has been attained in this line is the cure of rabies, or, rather, its prevention.

While much has been done in unraveling many of the mysteries of medicine during the nineteenth century, there still remains many things to be accomplished, and the field is sufficiently large and varied to accommodate all ambitious investigators in this noble and entertaining work.

PATENT MEDICINES AND PREACHERS.

There is no class of people in the world more easily imposed on than ministers of the gospel, and strange it is that this should be so, for they, above all other people, should at least understand the wickedness of the world, theoretically if not practically, and know that the average manufacturer and vendor of patent medicines is nothing more nor less than a sordid "money-grabber" who cares for nothing but "filthy lucre." But that is not the worst of it; his nostrums often contain drugs that are injurious, and, in many instances, lead to excesses in opium. Thousands of innocent babies are dosed with soothing syrups, and doubtless many of them find untimely graves as the result of the injurious effects of opium.

Ministers ought to remember that their signatures should always appear in their official capacity. They are not intended to grace the pages of advertising sheets and daily newspapers, extolling the value of remedial agents about which they are absolutely ignorant. The position of a minister should place him beyond any thing to which the finger of suspicion might be pointed.

SENATE BILL No. 34.

"Further prevention of cruelty of animals in the District of Columbia" is the innocent title of this very dangerous wolf in sheep's clothing. The real object of the bill is to prevent vivisection and to get other States to pass similar bills.

This question needs no argument with any sensible physician. The thing to do is to urge your congressmen and senators to vote

against it and to do all in their power to prevent the passage of Senate Bill No. 34. Such a law would be a great drawback to scientific research, to say nothing of the great loss to the animal industry of the country, as it would at once stop all investigations and experimental work in this direction. The country is full of "aunties" and "whining hypocrites" who want something to bring them into public notice, and this would, of course, afford a great opportunity for many of them.

The passage of such an act would, also, very seriously interfere with the proper education of medical men, as many of our important physiological demonstrations are made possible by using the lower animals for various kinds of experimental work.

It is to be hoped that every doctor in the United States will interest himself enough to write at least one letter to his congressman or senator, urging him to do what he can to prevent the passage of this iniquitous measure.

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Notes and Queries.

DISEASE AT SUMMER RESORTS.—The ingenuity of man is well exemplified in the modern large summer hotel. Built, as a rule, of inferior material, arranged to accommodate the greatest possible number of people consistent with decency, deserted for the greater part of the year, it is not to be wondered at that its sanitary appliances are often defective, and that disease finds there a ready soil for growth. To prepare for the reception, perhaps, of several hundred people is, in any case, not an easy problem, and when this is complicated with the necessary imperfections of construction of the ordinary summer hotel, one finds only cause for surprise at the relative health maintained by its guests. A counteractive element, no doubt, is the otherwise normal life which frequenters of summer resorts are likely to lead. There is, however, sufficient evidence to show that these resorts breed disease to an extent which demands active investigation.

Our attention has been called to the matter by some comments in the September number of the Bulletin of the Connecticut State Board of Health. Dr. C. A. Lindsley, the secretary, maintains that as cases are being more carefully registered it appears that a large proportion of the victims of infectious diseases are among those who have been visitors at the various summer resorts. He writes, in part, as follows:

"Summer guests themselves are learning to appreciate the risks of hotels, boarding houses, and even their own shore cottages. The last, in popular

localities where the price of land is high, are often so closely crowded together on small lots, with no special provision for sewage disposal, that they are frequently more unhealthy places of residence than the homes they leave in the city. The proprietors of the large hotels which are most liberally patronized know full well that a case of typhoid fever would scatter their guests almost as quickly as a conflagration, and hence the hotels are for the most part kept with scrupulous and vigilant attention to the practice of good sanitation. But in the cheaper hotels, and especially in the clusters of shore cottages, the violation of sanitary law is so frequent and so flagrant that if they were occupied continuously, instead of only for a few weeks at a time, they would soon become dangerously unfit for human habitation."

Dr. Lindsley suggests that apparently sporadic cases of typhoid fever may be due to a single focus of infection at a summer hotel, the disease developing only after the guests have scattered to their respective homes. This has, in fact, several times been proved to be the case. The moment the matter is brought to our attention such a theory seems altogether reasonable; with a certain amount of co-operation on the part of physicians in various States, it would not be difficult to trace many cases to a common source.

Dr. George Dock has recently communicated to the Philadelphia Medical Journal an experience which so well bears out the point of view already expressed that we quote it in part:

"Not long since I visited a celebrated waterfall, one of the many falls where in the summer season the water is dammed up and the 'fall' only produced for a pecuniary consideration. Beside the fall is a popular hotel, and the fall is visited by large numbers of people during the season. While I was examining the rock formation below and behind the fall, the water was turned on for some other visitors, who stood directly in the spray while they took photographs of the fall. Crossing over to a lower part of the fall, where I was exposed to the edge of the spray, I was struck by the strong fecal odor of the water. I called to the young men that the water smelled suspiciously of sewage, but they were too intent on their camera to pay attention to what I said. At the top of the fall I was told by the young lady who turned on the water that the water was nothing else than the stored-up sewage of the hotel, which was kept for the purpose. My surprise at this information was not lessened when the young lady went on to say that many people who visited the fall, thinking no doubt of Bryant's description of the "sweet light spray of the mountain springs," go down to the bottom of the fall and drink this same water. It is hardly necessary to enlarge upon the possible consequences of these draughts."

No doubt many of us have had more or less similar experiences. In any case one's respect for the summer hotel (there are exceptions), if not already at its lowest ebb, is visibly influenced by such facts as these. Summer is recognized as a time for recreation, but not, we trust, as a time when

sanitary laws are to be set aside as inactive. The proximity of the sea does not detract from the offensiveness of a foul odor, nor does it make the cause of that odor any the less deadly in its effect.—*Boston Medical and Surgical Journal*.

THE NEWER THERAPY OF GONORRHEA.—It was the discovery of the specific organism of the disease by Neisser two decades ago and its subsequent more elaborate exploitation by Bumm that gave an important impetus to the study of the course and effects of gonorrhœa. The medical mind was slowly forced to a realization that perhaps this malady, which in spite of its distressing nature had always been regarded as a matter of merely passing interest and to be treated lightly in a quasi-jocular way, might be a much more serious thing than had been supposed, and this uneasy suspicion was gradually succeeded by the absolute conviction that for gravity of consequences and variety of possible sequelæ its capacity was almost unlimited. And when the gynecologists took up the cry and denounced the infection as a two-edged sword which often cut deepest in innocent flesh, and after the lapse of years could produce in an unsuspecting wife consequences out of all proportion to the initial severity of the trouble in a long-ago erring husband, the full import of the situation was recognized, and the time-honored methods of treatment began to be abandoned and search made for surer and more definite remedies. The synthetic chemist has not been slow to respond to the demand, and the last half-dozen years have seen produced and extravagantly advertised as many so-called specifics—kaleidoscopic combinations each of them, in which silver is the central and active constituent, surrounded by picturesque, graphic formulæ of albumins, nucleoproteids, diethylamins, etc., added with the object of diminishing its irritating properties and increasing its penetrating power.

Kopp, of Munich (*Münchener Medicinische Wochenschrift*, August 1 and 8, 1899), presents a careful comparative analysis of the most important of these preparations, and though the observations of a single investigator are never conclusive, especial importance attaches itself to his results, inasmuch as they were obtained from perfectly fresh first attacks and exclusively from private patients, in whom it was possible to follow definite lines of treatment with exactness, rather than from dispensary patients, notoriously hard to control.

Argentamin (ethelyndiamin silver phosphate) was found to be markedly irritating even in solutions of a strength of 1 to 4000; decidedly more so than the usual silver nitrate solutions. No permanent disappearance of the gonococcus could be effected, and no cures resulted from its unaided use. A growing toleration for it, permitting its application in more concentrated form, was not observed.

Argonin (silver casein). Although less irritating than silver nitrate, in most cases it is inferior to the latter in efficacy. Up to a strength of four per cent it usually does not irritate, though sometimes even two-per-cent

solutions cause symptoms requiring its abandonment. Its expense also is against it, and its sphere of usefulness seems to be limited to those cases in which it is essential to avoid irritation as much as possible, and in which the use of silver nitrate, therefore, is not permissible.

Protargol (silver protein). Considerable confusion has arisen as to the merits of this preparation, owing to the fact that prior to June, 1898, samples of varying composition and strength were on the market. Since then the character of the remedy has been constant. Its use presents the feature, agreeable to the patient, of causing little irritation and a rather speedy checking of the discharge, though the discomfort attending the daily thirty-minute injections recommended by Neisser perhaps more than offsets these factors. On the whole it presents no decided advantages over silver nitrate.

Largin (silver protalbin). Although distinctly not to be considered as an abortive, still the use of this drug in the early stages of the infection seems to shorten its duration. Usually it irritates about as much as silver nitrate, and possesses no marked superiority over it.

Itrol (silver citrate). This preparation, so strongly advocated by Credé, seems to possess real merit. Its cheapness and the dilution of the solutions employed (0.05 to 200) are in its favor; its disadvantages are the difficulty of preparing aqueous solutions and the rapidity with which these decompose. It is also much commended as having great penetrating power, though the extent to which this is true is probably more limited than is generally supposed. Its undoubtedly strong bactericidal powers, however, and the fact that complications such as posterior urethritis, etc., seem to occur but seldom with its use, are sufficient grounds for recommending it to a prominent place in gonorrheal therapy.

Hydrargyrum oxycyanatum. The urethral mucous membrane evinces a considerable toleration for this reagent, solutions of 1 to 3000 or 1 to 1000 having produced no unpleasant results. In general it resembles protargol in its action, and has no greater claims to specificity than its predecessors.

Janet's irrigation method with potassium permanganate has proved disappointing, in the author's hands, both as an abortive agent and in the treatment of the acute form of the disease. In chronic and posterior urethritis, however, it is most valuable and satisfactory; if gonococci were still present in the secretion, silver nitrate, 0.2-0.5 to 1000, was used; after their disappearance potassium permanganate, 0.3 to 1000.

In short, it appears that though these various preparations may each have specific points of excellence, none of them can be designated as a specific for the disease; and though some, especially protargol, itrol, and the oxycyanate of mercury, are distinctly less irritating than silver nitrate, they do not seem destined to drive that hardworked reagent from urethral fields.

Although to the eye of the stern moralist the dread of a possible infection presents a most potent incentive to continence, still under existing

social conditions, and in dealing with a malady so far-reaching in its consequences as this, no means of restricting its spread should be neglected. Indeed, it is quite worthy of belief that the universal dissemination among the laity of the fact that a few drops of a twenty-per-cent solution of protargol in glycerin, instilled into the fossa navicularis after a suspected coitus, will secure almost perfect immunity from infection would react only in a beneficial manner on the welfare of the race. It is at least an experiment well worth the trial.—*Medical News*.

AN ADVANCE IN GASTRIC SURGERY.—The first meeting for the year of the Section on Surgery of the New York Academy of Medicine brought out a series of clinical contributions, the results mainly of the summer's work, containing much that was of practical interest. Dr. Curtis' cases of pylorotomy and partial gastrectomy represent the newest phase of gastric surgery. How ultimately hopeless operations for gastric cancer are all surgeons are agreed. Even the recent cases of total, or almost total, excision of the stomach, which have attracted universal attention from their boldness, while successful as operations, have succeeded only in putting off the inevitable for a brief period. The step in advance, then, that is suggested by the proposal to operate before definite signs of cancer have presented themselves promises to be a gain for surgery, provided certain reasonably sure indications for operative intervention can be established.

The proposal to resort to surgery in obstinate cases of dyspeptic trouble will not seem too radical to those who have realized the hopelessness of ordinary medical treatment in many of them. As was stated, French surgeons have not only argued very plausibly as to the advisability of surgical intervention in such cases, but have put the idea to the test with reported good results. Not only in the stenotic conditions of the pylorus, but in dilatation of the stomach, and even in obstinate interference with its peristaltic functions, gastro-enterostomy is justifiable when it becomes evident that medical means will not give relief. The operation practically makes of the stomach only a very temporary receptacle for food, and dispenses with the gastric digestive functions entirely. Recent experiences, both medical and surgical, have shown, however, that the gastric functions are by no means the indispensable agents for digestion and nutrition that they have formerly been considered.

If by these operations for obstinate gastric dyspepsia the development of cancer of the stomach could sometimes be anticipated, as would undoubtedly be the case, for long-continued gastric irritation predisposes to cancer; or, as in Dr. Curtis' cases, if the cancer could, by a fortunate chance, be discovered before it had given rise to any characteristic symptoms of a malignant neoplasm, a most fortunate benefit would be secured for the patient and a great surgical triumph scored. The subject is yet in its incipiency, but enough has been done to point out a way of possible advance in surgery, in a matter that is of great practical importance, and which thus far has proved most discouraging.—*Ibid.*

—THE—
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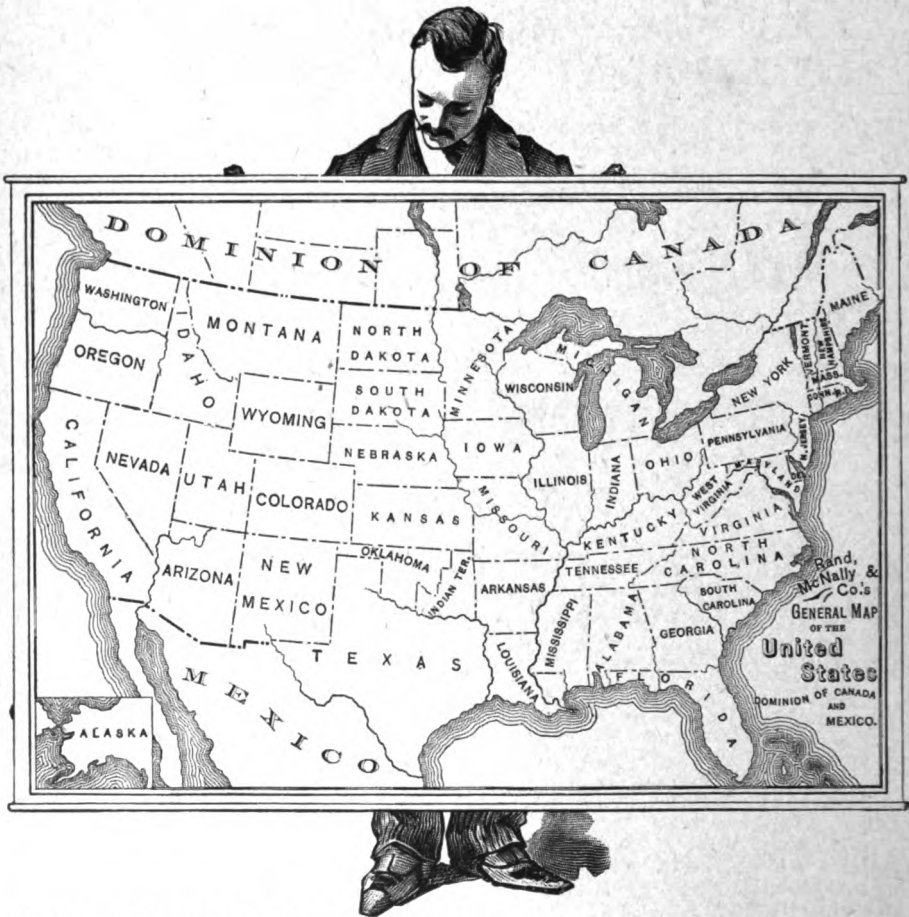
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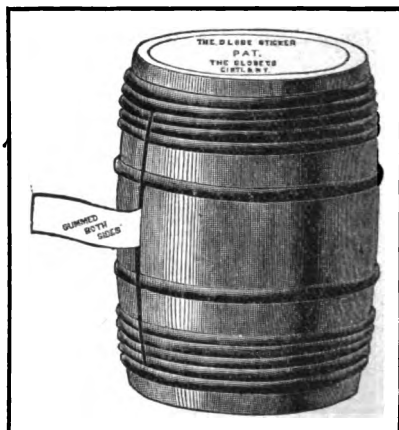
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